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retro GAMER

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HOW DISNEY'S MICKEY MOUSE TURNED INTO A POPULAR PLATFORMING STAR

THE MAKING OF PARASOL STARS

WHY BUB AND BOB LEFT THE ARCADES FOR THEIR CUTE PC ENGINE ADVENTURE

ATARI 2600+ SPECIAL

DEVELOPER SECRETS OF THE WORLD-CONQUERING CONSOLE – AND THE STORY BEHIND THE 2600+

THE MAKING OF ANCIPITAL

THE GOAT CODER RELOADS HIS CLASSIC C64 SHOOTER

STUDIO PROFILE: VOLITION INC

HOW THE ILLINOIS STUDIO WENT FROM DESCENT TO SAINTS ROW

FUTURE
LOAD 253

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THE HIT CODER GETS FLASHBACKS REVISITING HIS ILLUSTRIOUS PAST

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THE RETROBATES

WHAT'S THE FIRST GAME YOU'LL PLAY ON THE ATARI 2600+

DARRAN JONES

I love *Frostbite*, so I'll probably play that. I'd also be tempted to stick *River Raid* on as well.
Expertise: Juggling a gorgeous wife, two beautiful girls and an award-winning magazine, all under one roof!
Currently playing: *Shadow Of Rome*
Favourite game of all time: *OutRun 2006: Coast 2 Coast*

TIM EMPEY

I first played *Spy Hunter* on the C64 (or maybe in an arcade), so I'd like to see how it fairs on this. And for the *Peter Gunn* theme too.
Expertise: Finishing Game Pass games before they go
Currently playing: *Resident Evil 4 Remake*
Favourite game of all time: *God Hand*

NICK THORPE

It was *Warlords*. My paddle controllers could use some TLC, so I really wanted to test out how the new CX30+ ones felt.
Expertise: Owning five Master Systems and a Mark III
Currently playing: *Agent A: A Puzzle In Disguise*
Favourite game of all time: *Sonic The Hedgehog*

ANDY SALTER

The Atari 7800 was my first console and *Rampage* was my favourite game. Although, I'm not sure if it was the 7800 or 2600 version I had.
Expertise: Modding games, no 'vanilla' versions for me, thanks!
Currently modding: *Total War: Rome Remastered - RTR: Imperium Surrectum*
Favourite game of all time: *Rome: Total War* although I guess it's the *Remastered* edition now

RORY MILNE

Yars' Revenge has always been my go-to Atari 2600 title, partly because of the immediacy of its gameplay, but also because of its layers of risk vs reward mechanics.
Expertise: The game that I'm writing about at the time of writing
Currently playing: *Crash Bandicoot*
Favourite game of all time: *Tempest*

PAUL ROSE

For me it's *Combat*; the first game I played on the original.
Expertise: Winging it
Currently playing: *Super Mario Bros Wonder*
Favourite game of all time: *Half-Life 2*

PAUL DRURY

Of the bundled games, *Combat* is still a joy to play against a frenemy. Then I'd plug in *HERO* and wonder at just how coder John Van Ryzin packed so much game into such a small space.
Expertise: Hendy's jeans
Currently playing: *Tron*
Favourite game of all time: *Sheep In Space*

MARTYN CARROLL

It has to be *HERO*. It's one of my favourite games and unlike a lot of 2600 titles, its appeal lasts longer than three minutes.
Expertise: Sinclair stuff
Currently playing: Super Mario Bros Wonder
Favourite game of all time: *Jet Set Willy*

IAIN LEE

I never played *River Raid* so I am going straight on there when mine arrives.
Expertise: Buying expensive stuff on eBay then never touching it
Currently playing: We Were *Here Together*
Favourite game of all time: *Elite (BBC Model B)*

LOADING...

While we've seen many Mini consoles in recent years, the Atari 2600+ is a far more ambitious system. Rather than being stuffed full of games, it will allow you to play the vast majority of your classic Atari 2600 and 7800 games, along with homebrew titles and any new games that Atari releases for the system. You can read all about it on page 32. To help explain the popularity of Atari's original iconic console, we spoke to a number of developers, including David Crane, about coding games for the system as well. So that's a double helping of Atari goodness for you to enjoy.

Elsewhere in the issue you'll find the evolution of *Disney's beloved Illusion* series, the creation of *Parasol Stars*, how Jeff Minter crafted *Ancipital* for the Commodore 64 and the difficulties Neversoft faced creating *Spider-Man*. We also quiz numerous artists about the gorgeous maps they made for many big-box computer games and chat to Paul Cuisset about his interesting career.

And if that's not enough, there's the chance to win an amazing Switch OLED and a copy of *Sonic Superstars* courtesy of Sega on page 9 and we're still running our fantastic offer to get TheC64 Mini with a new subscription (see page 36).

Stay safe and enjoy the magazine.

CONTENTS

>> Load 253 Breathing new life into classic games

RETRO RADAR

6 **Main News**
Microsoft finally completes its astonishingly expensive acquisition of Activision Blizzard

8 **Iain Lee**
If you like retro-themed podcasts, you'll want to give Iain's new show a listen

9 **News Wall**
Find out about a new *Dracula* game for the Game Boy Color and make sure you enter our *Sonic Superstars* competition

10 **Mr Biffo**
Paul tells us about the gaming lull he's currently found himself in

12 **A Moment With**
We chat to Mike Chi about his exciting new upscaling device, the RetroTink 4K and how it will improve on the RetroTink 5X

16 **Back To The Noughties**
Nick has found himself in April 2007 where everyone is trying to outsell each other

REVIVALS

20 **Killys**
He's not the biggest expert when it comes to Oric-1 games, but Darran did have a lot of fun with this *Scramble* clone

42 **Chase HQ**
He might not have played it on release, but Nick fully understands why Ocean's arcade conversion is so good

72 **F-Zero**
Playing through Nintendo's *F-Zero 99* had Darran yearning for a simpler time in the franchise's life

94 **MotorStorm**
Nick loves being late to the party, so of course he's only just found the time to play this early PlayStation 3 release

FEATURED

44 **The Map Makers**
Discover how artists made cartographic treats to enhance your new games

56 **Whatever Happened To… Home Alone 2: Kevin's Dream**
A game so troubled, even its developer can't remember much about it

58 **So You Want To Collect… LucasArts Games**
Graham Pembrey has ten fantastic games for you to keep an eye out for

62 **Peripheral Vision: TurboStick**
Was NEC's TurboGrafx-16 stick a good option for gamers?

64 **The Evolution Of: Disney's Illusion Games**
Find out how Mickey's popular platform adventures adapted to suit each new system they appeared on

74 **Studio Profile: Volition Inc**
We go behind the scenes of the recently closed studio and examine its rich legacy of games, from *Descent* to *Saints Row*

80 **Future Classic: Suika Game**
Nick's latest puzzle game obsession will most likely become yours as well

82 **The Making Of: Spider-Man**
Learn how Neversoft had the difficult task of creating the world's first fully 3D *Spider-Man* adventure

86 **Hardware Heaven: Game Boy Advance SP**
We take a quick look at Nintendo's successful update of its popular handheld

22

Inside The Atari 2600

Discover the many technical challenges that developers like David Crane tackled while programming games for Atari's iconic console

The Making Of: Ancipital

Paul Drury travels to Wales and chats to Jeff Minter about one of his favourite games

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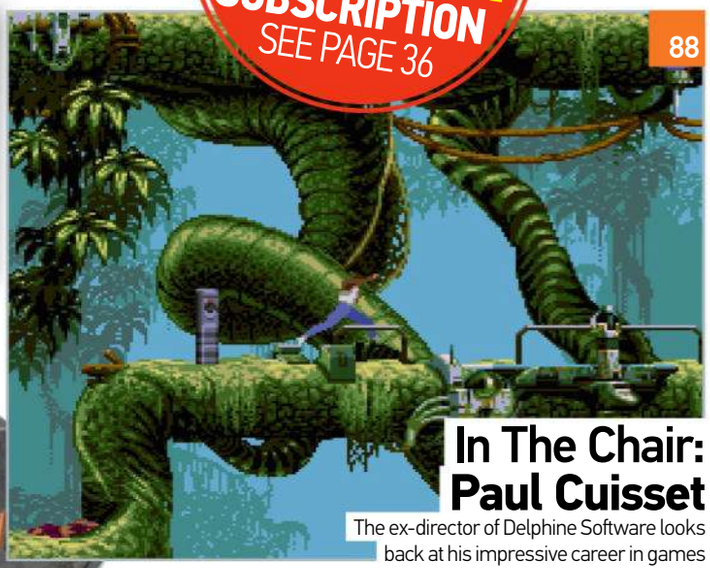


88

In The Chair: Paul Cuisset

The ex-director of Delphine Software looks back at his impressive career in games

32

The Making Of: The Atari 2600+

REVIEWS

96 Super Mario Bros Wonder
98 Super Pocket
99 Sonic Superstars
99 Metal Gear Solid Master Collection Vol 1
99 Formula Retro Racing – World Tour

ESSENTIALS

36 **Subscriptions**
More thrilling than winning your first game of *Combat*

100 **Homebrew**
Nick steps in for Andrew Fisher and discovers a new *Frasier* game

104 **Hot Topic: A Look At LucasArts**
Darran, Tim and Nick pay tribute to the popular development studio

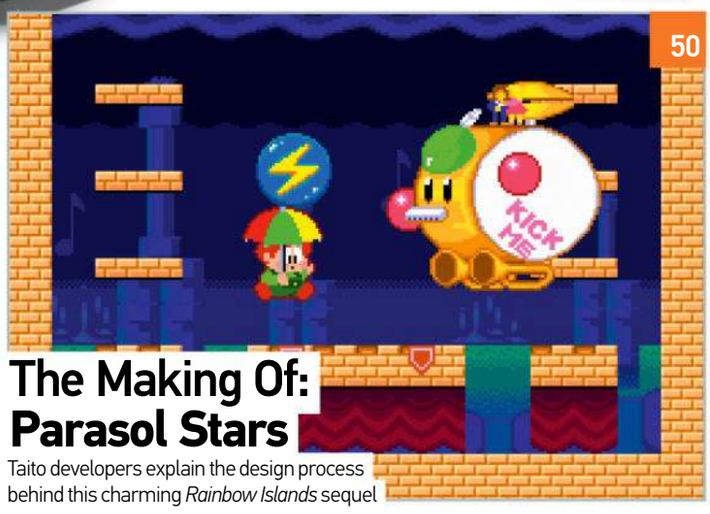
106 **Collector's Corner**
If you like arcade games and the NES, you'll certainly like our collector's haul

108 **My Retro Life**
Darran receives a time machine for his 50th birthday

110 **Mailbag**
Here's just some of the letters we've been enjoying

113 **Next Month**
Try and work out which game will grace our cover

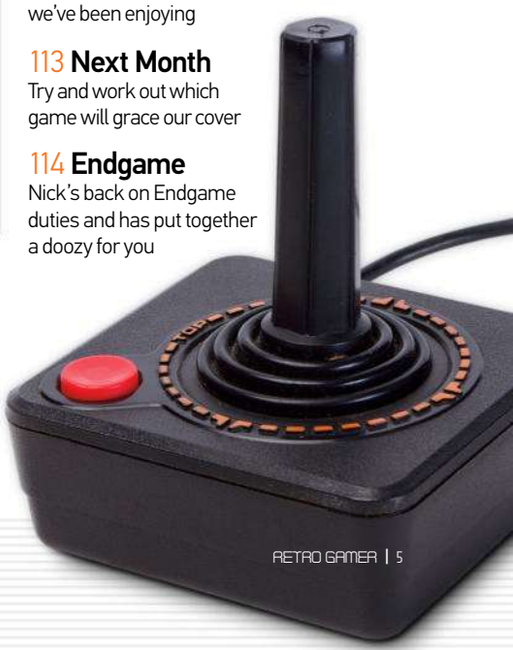
114 **Endgame**
Nick's back on Endgame duties and has put together a doozy for you



50

The Making Of: Parasol Stars

Taito developers explain the design process behind this charming *Rainbow Islands* sequel



» PC] It's mind-boggling just how many iconic gaming franchises Microsoft has just purchased.

ACTIVISION ACQUIRED

Microsoft finally completes gaming's biggest acquisition

CONTENTS

6 ACTIVISION ACQUIRED
We take a look at Microsoft's huge acquisition of Activision Blizzard and what it means for retro fans

8 IAIN LEE
This month Iain chats about *Random Access Memories*, his excellent new retro-themed podcast

9 NEWS WALL
All the latest news on a brand-new official *Dracula* game and an amazing chance to win a Switch OLED.

10 MR BIFFO
Do you ever have dry spells when it comes to gaming? Paul's going through one at the moment

12 A MOMENT WITH
Mike Chi stops by to discuss the RetroTink 4K, his exciting new upscaler that looks like it could be a game-changer for retro fans

16 BACK TO THE NOUGHTIES
Nick once again bravely heads back to the past. This time he's only gone and found himself in April 2007

On 13 October 2023, Microsoft officially announced the completed acquisition of Activision Blizzard for an astonishing $68.7 billion. The completed deal not only includes precious brands like *Call Of Duty*, *Diablo*, *World Of Warcraft*, *Crash Bandicoot* and *Candy Crush*, but a number of subsidiary studios. Beenox, Demon Ware, Digital Legends, High Moon Studios, Infinity Ward, King, Major League Gaming, Radical Entertainment, Raven Software, Sledgehammer Games, Toys For Bob and Treyarch all now fall under the Microsoft umbrella, and join earlier acquisition Zenimax Media, which owned Arkane, id Software, MachineGames and Tango Gameworks. That's an impressive amount of talent and between them they're responsible for some truly fantastic modern franchises. King is also a big deal, thanks to its huge success in the mobile division with games like *Candy Crush* and *Farm Heroes Saga*, which generate huge amounts of revenue.

» [Xbox One] *Crash Bandicoot* is just one of the big franchises that Microsoft now owns.

> "We wouldn't be surprised if the Games Pass catalogue begins to swell with retro classics over the coming months"

Originally announced by Microsoft in January 18 2022, the publisher has faced several challenges with the acquisition due to pressure from the European Commission and later the UK's Competition And Markets Authority (CMA), with the CMA ruling against the move in April 2023 citing several reasons, including Microsoft's dominance in cloud gaming. In fact, the Federal Trade Commission (FTC) in the United States has planned to reopen its case against Microsoft, but so far hasn't been able to prevent Microsoft from closing the deal.

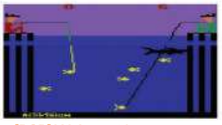
Microsoft has made various concessions to push the gigantic deal through, including promising that the *Call Of Duty* series will continue to appear on non-Xbox platforms for the next ten years and that its streaming rights will be sold to Ubisoft for its cloud service Ubisoft+ for the next 15 years. Activision's Bobby Kotick, who has been its CEO since 1991, will be reporting directly to Phil Spencer to help smooth the transition of the companies, but is due to leave in December.

Obviously, the news of the acquisition is concerning some gamers because since the Bethesda acquisition, high-profile games like *Starfield* haven't appeared on rival consoles and Microsoft now has access to some incredibly important franchises, which fans fear may also never reach rival systems. Microsoft has proven with the likes

» [PC] Interestingly, the original *Call Of Duty* isn't available to buy on Microsoft consoles. Could this now change?

» [PC] *True Crime* is another Activision franchise that has lain dormant for years.

» [PC] Modern games like *Overwatch 2* remain immensely popular, but will they remain on rival consoles now?



» [PSP] We've not been able to play Activision's Atari 2600 classics on consoles since 2006. Here's hoping that changes now.

of *Minecraft* that it clearly favours money over exclusivity, and while we're sure some games will be locked to Xboxes going forward, *Call Of Duty*'s multiformat status seems assured, at least for the next ten years. Another concern gamers have is that it's simply not good for gaming if so many studios are owned by one company. It's unclear if Microsoft has plans to acquire more studios, but what is clear is that if Microsoft does take an interest in other parties, it certainly has the sheer financial might to follow through.

So what does all this mean for a fan of retro games? The most important thing to take away from this is that there's no reason that lots of classic games from the acquired studios won't be made accessible again to a new audience. We wouldn't be surprised if the Games Pass catalogue begins to swell with retro classics over the coming months, as Activision and Blizzard have a huge amount of desirable classic franchises between them.

Tony Hawk's Pro Skater, *Crash Bandicoot*, *Spyro The Dragon*, the *Quest* games, *Pitfall!*, *Guitar Hero*, *Cabela's*, *True Crime* and *Geometry Wars* are now all owned by Microsoft, and there are even deeper cuts like *Zork* to consider as well. It's highly unlikely we'll ever see reissues of Activision's *Spider-Man* and *Teenage Mutant Ninja Turtles* games, but we certainly wouldn't say no to Digital Eclipse being commissioned to reissue Activision's classic Atari 2600 games on modern systems, providing of course it's recent acquisition by Atari doesn't prevent this.

For all the rich heritage currently laying dormant in Activision's vaults, it's worth remembering that there's plenty to consider over on the Blizzard side of the acquisition as well. Franchises and games like *The Lost Vikings*, *Rock 'N Roll Racing* and *Blackhawk* have had little done to them, other than *The Blizzard Arcade Collection*, so it would be nice to see some of those resurrected, or at least become permanent additions to Games Pass. It's far more likely though that we will see a laser focus on big money spinners like *Diablo* and *StarCraft*, although we can't imagine it would be too difficult to resurrect the popular *Warcraft* strategy games, particularly for PC.

Microsoft has already proven that it has a good track record when it comes to making older titles available on its systems. You only have to look at *Rare Replay*, Microsoft's extensive backwards compatibility commitment and the availability of classic franchises like *Doom* and *Quake* to see that.

We've seen some impressive acquisitions over the last few years, but none come close to the sheer scale of this one. Here's hoping it leads to lots of great games, regardless of whether your interest is in modern or retro gaming.

» [PC] Imagine a brand-new game based on *The Lost Vikings*. We'd certainly be up for it.

» [PC] *Warcraft III: Reforged* proved that Blizzard saw the strength of resurrecting old classics. Hopefully this will continue with Microsoft.

AN ATARI ACQUISITION

Atari recently revealed that it had purchased Digital Eclipse for $20 million. Acclaimed for its excellent work on historical compilations like The *Teenage Mutant Ninja Turtles: The Cowabunga Collection* and its recent *Karateka* documentary, the studio has already worked alongside Atari with *Atari 50: The Anniversary Celebration*. It now joins Nightdive Studios as another developer at Atari with expertise at restoring classic games. Could this be a new change of direction for Atari?

ANALOGUE LEVELS UP

Analogue recently announced its next FPGA-based project – the Analogue 3D. It promises to be the ultimate update of the N64 and boasts full compatibility across every region, a 4K output and reference quality representations of specific model CRTs and PVMs. While there's no doubting the quality of Analogue's output, some have pointed out the lengthy production time of its last project, the Analogue Duo. We'll hopefully have more information in our next issue.

Who is Iain Lee?
Iain Lee is a freelance counsellor who loves gaming, particularly retro gaming. You can get more information about Iain by visiting iainleecounselling.com or heading over to patreon.com/iainandKatherine

Random Access Memories

I started a gaming pod because there are not enough podcasts with old men talking about pop culture from the past. In fact, I think I may well be the very first to try this bold and daring creative endeavour. I've put off doing a show like this for a long while now, and for so many good reasons. Firstly, what can I offer that *This Week In Retro, Our Sinclair, The Computer Game Show* and a million other podcasts don't? Secondly, do I really want to commit to making a semi-regular and all the work that goes with it?

The answer is a hesitant, slightly unsure yes. I really have dived/diven/doved deeply into the world of retro gaming recently after sitting on the edge of the pool for a while. I think I can trace it back to seeing that Dragon 32 in a junk shop in Liverpool in February. That woke up some dormant gene in my body that has been growing and changing shape ever since then. You won't be surprised to know that I did end up buying a Dragon, as well as a C64 Maxi and dug my old BBC with a Gotek drive out of the garage. I'm currently fighting the urge to buy a Spectrum+2, a battle that I will inevitably lose.

What's made me want to go further into this universe is the incredibly warm welcome I've received. My Dragon was a bit shonky and not doing some things right. I tweeted about it and a guy that goes under the username of @HereBeDragons3 got in touch and offered to fix it for free. I was having some issues with my Beeb and went on a Facebook page and had a dozen individuals all doing their darndest to help me work it out. There are countless more examples.

I found this a little weird to start with. What do they want from me? I soon realised they wanted nothing apart from the ability to help and a chance to do something nice for a stranger. Oh, and to exercise their rather niche skills. This blew me away. I live on my own, not with my kids or my partner. I generally love it, although it can get a little lonely. Suddenly I am a member of some small but significant communities and it has had a hugely positive impact on my spiritual wellbeing and my mental health. There's even talk of a Dragon 32 meet up in Cambridge, the kind of thing in the past I would have been terrified to go to. If I don't have the kids, I'm definitely going. You may say "take the kids!" and while they are retro fans, I think an afternoon of just Dragons may be too much even for them.

So that's why I'm making a podcast. I want to feel part of something. I've spent most of my life hiding myself away and it's the right time to change that. If you fancy in, look out for *Iain Lee's Random Access Memories* and have a look at patreon.com/iainLee I now just need to work out what it's going to sound like…

> "I'm currently fighting the urge to buy a Spectrum+2, a battle that I will inevitably lose"

Do you agree with Iain's thoughts? Contact us at:
RetroGamerUK @RetroGamer_Mag retrogamer@futurenet.com

» [Game Boy Color] Dracula isn't the only undead fiend lurking in the castle.

DRACULA RETURNS

AN OFFICIAL ADVENTURE IS HEADING TO THE GAME BOY COLOR

Whether he's acting as an adversary in the *Castlevania* series, or is the focus of investigation in *Dracula The Undead* on Atari's Lynx, Count Dracula has appeared in no shortage of videogames. Proving that the undead can never die, a brand-new Dracula game is heading to the Game Boy Color of all places, but this one appears to have the actual blessing of The Stokerverse Project, meaning it has been approved by Chris McAuley and Dacre Stoker, the great grand-nephew of Bram Stoker.

Dracula: Dark Reign is being published by Incube8 Games and will be receiving an official cartridge release. It's planned to appear in 2024 and coding duties are being handled by Spacebot Interactive, which is currently working on the Kickstarter project *Dragonhym*. One interesting aspect of *Dracula: Dark Reign* is the introduction of a brand-new prologue that comes directly from Bram Stoker's personal notes and will feature Jonathan Harker escaping from Count Dracula's foreboding castle.

In an ironic twist of fate, the gameplay itself will be based upon *Castlevania*-style gameplay, although the available video gives little away as to what style of *Castlevania* game it will be. What we do know is that the official website promises that, "The game delves deep into the lore of Bram Stoker's original novel, seamlessly pushing the storyline forward while maintaining the essence of the source material."

Needless to say you can expect a review some time next year.

» [Game Boy Color] Screens like this suggest there could be RPG elements in *Dracula: Dark Reign*.

» [Game Boy Color] There's no time to rest Jonathan, you have to escape Dracula's castle.

SONIC™
SUPERSTARS
COMPETITION
WIN A SWITCH OLED AND SONIC SUPERSTARS*
Sonic Superstars, the latest *Sonic* game from Sega is a throwback to his classic side-on adventures of old. Designed by Arzest and Sonic Team, it captures the essence of the original Mega Drive games, while adding plenty of ideas of its own. We've teamed up with Sega to offer you the chance to not only win a copy of the game on Switch, but also a Switch™ OLED to play it on.
The winner of this prize (which is only open to UK residents) will receive a Switch™ OLED and a copy of *Sonic Superstars* on Switch. Second prize is a copy of *Sonic Superstars* on Switch with a set of smart *Sonic the Hedgehog* Top Trumps cards, while third place will receive the Top Trumps playing cards. Good luck!
To win, all you need to do is answer the following question by 21 Dec 2023.
What was the first game Sonic the Hedgehog appeared in?
Send your entry, titled 'Sonic Competition', to retrogamer@futurenet.com.
Rules can be found at futureplc.com/competition-rules/
*Entry is for UK residents only. Competition closes 21 Dec 2023
1ST PLACE
SWITCH OLED + SONIC SUPERSTARS
2ND PLACE
SONIC SUPERSTARS (SWITCH) + SONIC TOP TRUMPS
3RD PLACE
SONIC TOP TRUMPS

Who is Paul Rose?
Paul is probably better known as Mr Biffo – the creator of legendary teletext games magazine *Digitiser*. These days, he mostly writes his videogame ramblings over at Digitiser2000.com. If you want more Biffo in your eyes, you can catch him as the host of *Digitizer The Show* at www.bit.ly/biffo2000.

Confession time

've a confession to make: I haven't been playing games all that much recently. Alright, alright; I've not been playing them at all. As I write this, I've not touched any of my games in over a month. That might be a strange admission at the top of a column in a magazine about gaming, but… I'm of the firm belief not gaming is as much a part of gaming as the actual playing. If, like me, history lessons taught the importance of crop rotation, you know the necessity of leaving a field fallow for a season. It's the same with games; having a break will make me appreciate them all the more when I next pick up a joypad.

I haven't played games continuously during my life. There have been several periods where I didn't touch them for months or more at a time. I'm in one of those dry spells now. No real reason for it other than having had a busy few months.

The first real fallow period I remember was after I left school and went to work. My Atari ST sat untouched for months, until I bought a Master System with one of my first paycheques, and *Alex Kidd* reignited it all over again. From then on, my wages were swallowed up by games. When the Mega Drive was released, things only got worse.

But it wasn't to last. When I went to work at Teletext – initially as a graphic designer – my commute was 90 minutes, minimum, each way. I had young kids by then, and little time or energy for gaming once I got home. It wasn't until I accidentally found myself writing *Digitiser* that I began playing again, after a break of a year or so – and this time not just for fun. It reminded me of what I'd missed.

At the other end of *Digi*'s life, some ten years later, I was suffering chocolate factory syndrome – I'd played so many games over that decade that there was a period where I couldn't bear the sight of them.

It was the Xbox 360 that changed things. The launch titles were a mixed bag to be sure, but one of them convinced me to invest in this new generation; *Peter Jackson's King Kong: The Official Game Of The Movie*. By no means a great game, but the visuals had impressed me. Specifically the mud and rain effects. When I finally got around to playing *Call Of Duty 2*, I once again spent ages just looking at the mud and the rain, and somehow because of that I fell in love with games all over again. It began probably the longest uninterrupted run of regular gaming I've had in my life… lasting up until a month or so ago.

I know it's only temporary. I just need a break to look up from my screen for a while, and focus on other things. Family. Work. Me. Even so, there are new *Mario* and *Sonic* games out, so… y'know. This'll be a short break.

Do you agree with Paul's thoughts? Contact us at:

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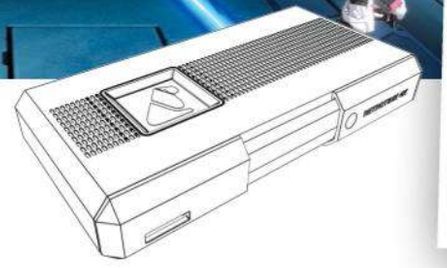
» 720p games like *Hard Corps: Uprising* will look much better when upscaled on the RetroTink 4K. "I think there's been a big demand because people don't like the way some TVs handle 720p scaling, even though it's a modern-ish resolution," says Mike.



» Mike Chi is the creator of the RetroTink range. You can find his products at retrotink.com
Photo image: RetroRGB.com

RetroTink 4K

Mike Chi talks us through his incoming upscaler

After being incredibly impressed with Mike Chi's RetroTink-5X (both Nick and Darran own one) the team is now looking forward to the incoming RetroTink 4K. Creator Mike Chi explains how it has all come together.

Why make an upscaler that targets 4K?

I think there's really two things… [sharp pixels and CRT simulation]. One of the big things is, you have optimal sampling, but you never quite get the right proportions, but with a 4K you can use linear scale directly from the console to 4K and basically get all that at once. So that's the sharp pixel side. The other thing is at 4K you have a lot more pixels to work with for CRT simulation. So you can create not only scanlines, but CRT shadow masks and aperture grills at 4K, which look a lot better than 1080p because you have more detail to work with.

How long has the RetroTink 4K taken you to create?

I think I started at the beginning of last year. So, if you add everything up I would say probably about a year and a half of development time. But you have to keep in mind that a lot of this is building on stuff that was done for the 5X… So if you think about it that way then I'd say a couple of years.

Are there any major learnings from the work on your previous RetroTink models?

Yeah, I think a lot of the 4K really is 5X on steroids. So a lot of the FPGA development on the 5X, which basically starts from there and you make it work for 4K, right? That's not to downplay the amount of work it does, but it was a good starting base.

Various people within the retro community are currently testing the device. How helpful are these tests in getting the device to where you need it to be?

The help has been exceptional. If you compare this state of maturity or the firmware of the 5X in terms of features, and especially bugs versus what we'll hopefully see, with the 4K it's gonna be night and day. The 4K is gonna be a much more mature and polished product just because it has been tested so thoroughly. I would say the value that the testers have provided in the feedback, in terms of adding useful features to make the user's life better, as well as fixing bugs, far exceeds the value of the hardware that I sent. So I'm immensely grateful.

» Here's RetroRGB.com showing off various scanline options. The UI here is a lot slicker than the one found on the RetroTink-5X.

What about checking support on systems like arcade boards and more obscure consoles?
I just don't own these devices, so having someone be willing to take the time to play with it and make sure it works is just immensely helpful. None of that was done for the 5X. It was kind of more shoot from the hip. The hope is to come out with a much more mature device, and that's all thanks to the help I got from testers.

Which enhancements over the 5X are you most proud of?
The big thing I think that people have been looking for is CRT simulation. So with the more advanced algorithms you could run on the 4K because it's a more powerful device, as well as HDR (on the TV side), you get a much more realistic CRT simulation effect. I'm proud of this. Also, the overall user interface is much more polished. The menus are clean and simple to navigate, but they provide at the same time a lot more options to adjust for the user than the 5X ever did.

How do the FPGAs used in the two devices compare in terms of cost and capability?
Let me just do some rough maths. [Does some rough maths]. There's a bunch of metrics but [the FPGA is] roughly between 10 to 20 times more powerful on the 4K than the 5X. Again, that's a very rough calculation based on just dividing a bunch of features from one device to the other and I would say it's probably about an order of magnitude more in cost.

In terms of price, what you've said is, "Budget for $1,000 and hope to be pleasantly surprised." Are there any other elements of the device pushing the price up beyond the FPGA?
Absolutely. I mean it has a much better case. So the case was more expensive to produce and there's other parts besides just the FPGA, although the FPGA is probably the biggest driver of costs. There's more parts that add a little bit more cost but the FPGA adds a lot more cost. And of course the big thing is just development time. It took a lot more development time to get here and I think it's gonna take a lot more time to properly support this project.

Will the 5X continue to be available after the 4K's launch?
Yeah, definitely. There's no reason to discontinue the 5X… I think for the vast majority of users the 5X might still be the best choice because it's simpler and a lower cost. The 4K is more of a premium.

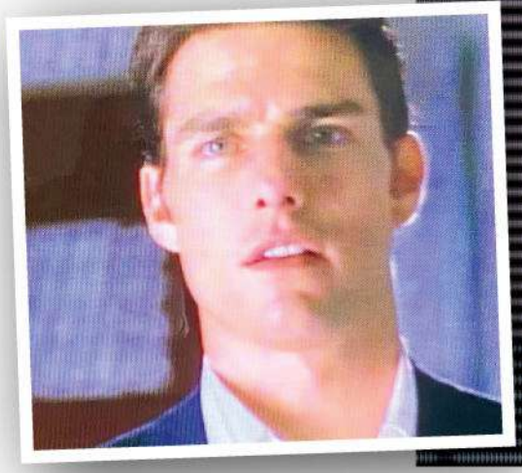
Additional images courtesy of RetroRGB.com See its full reveal of the RetroTink 4K over at youtube.com/watch?v=E3ep6sw0c8Y&t=391s

> "The value that the testers have provided in terms of adding useful features to make the user's life better, as well as fixing bugs, far exceeds the value of the hardware I sent"
> **MIKE CHI**

» The RetroTink 4K builds on the work of Mike Chi's popular RetroTink-5X.

» Mike feels that the RetroTink 4K's ability to do true HDR over the RetroTink-5X is "huge for CRT simulation".

» The RetroTink 4K offers a staggering amount of inputs, with HDMI being the biggest update over the RetroTink-5X.



» If you're interested in watching laserdiscs like Darran is, Mike says, "There's more improvements in the 4K for laserdisc and film content, but those aren't there yet."

» This close up by RetroRGB.com highlights just how accurate an OLED TV can be next to a CRT when using a RetroTink 4K.

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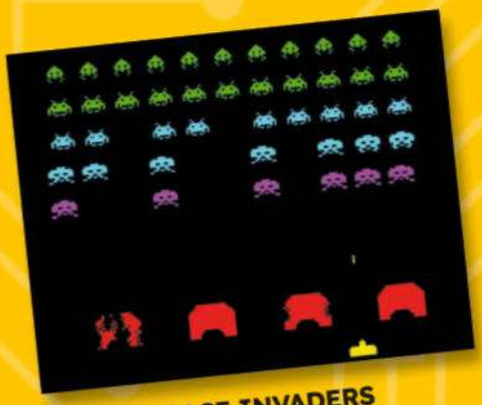
SUPER POCKET

PUZZLE BOBBLE

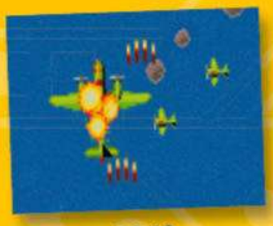


SPACE INVADERS

RASTAN

ARCADE IN YOUR POCKET!

MEGA MAN



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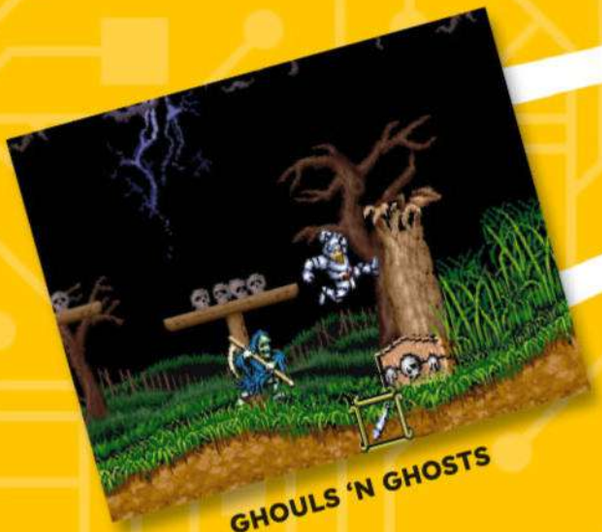

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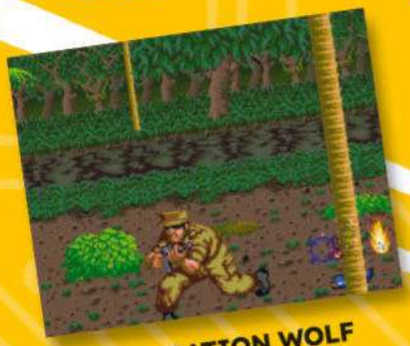
18 TAITO ARCADE* GAMES



OPERATION WOLF

BUBBLE BOBBLE

TAITO EDITION

HYPER MEGA TECH!

START

12 CAPCOM ARCADE* GAMES

STREET FIGHTER 2: HYPER FIGHTING

CAPCOM EDITION

HYPER MEGA TECH!

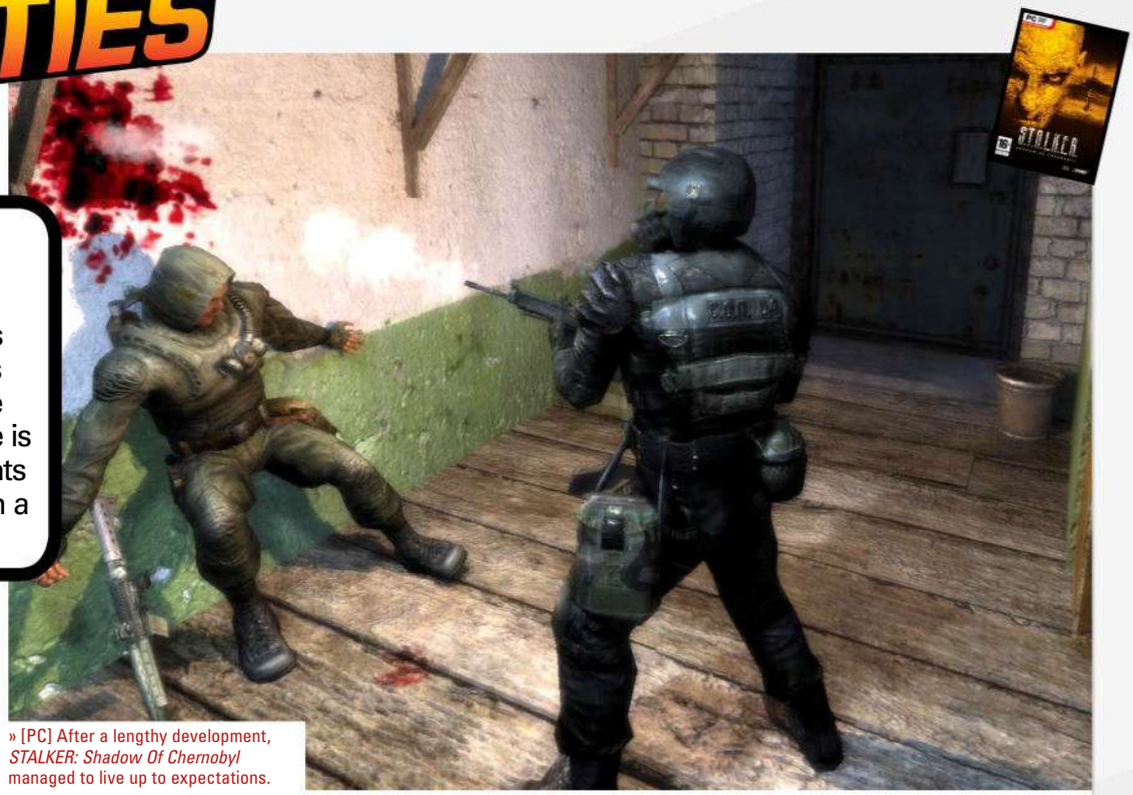
SELECT

START

STRIDER

WATCH THE SUPER POCKET TRAILER

BACK TO THE NOUGHTIES



» [PC] After a lengthy development, *STALKER: Shadow Of Chernobyl* managed to live up to expectations.

APRIL 2007 – The new generation sales race takes shape, while a spring software stampede ensures that players on all platforms have something worthwhile to pick up. Nick Thorpe is your guide to the events best experienced with a time machine

NEWS APRIL 2007

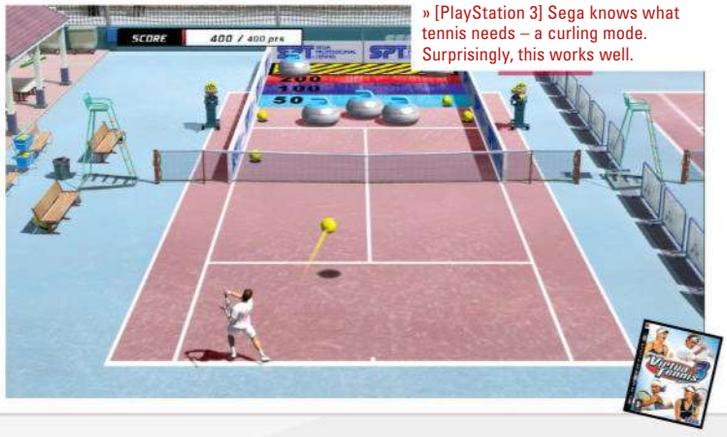
On 1 April, the BBC broadcast the 50th anniversary episode of *The Sky At Night*. The show was presented by Patrick Moore, who had been the host since the show's debut in 1957, with Jon Culshaw portraying a younger version of Moore. At the time, it was the world's longest-running show to be hosted continuously by a single presenter – Moore had missed just one episode due to illness in 2004.

American author Kurt Vonnegut passed away on 11 April at the age of 84, from injuries sustained in a fall. After serving in the army during World War II, during which time he was captured and interned in Dresden, he gained fame for his short stories, plays and novels, with *Slaughterhouse-Five* being his breakthrough work. He remains a revered and influential figure in the field of literature.

A mass shooting was perpetrated at Virginia Polytechnic Institute And State University on 16 April. 32 people were killed and 17 injured before the murderer, Seung-Hui Cho, turned the gun on himself. Though he was found mentally ill by a Virginia special justice after stalking two women in 2005, he was able to buy guns – a fact that drove firearms law reforms in 2008.

THE LATEST NEWS FROM APRIL 2007

With Microsoft, Sony and Nintendo all having launched their new consoles, the argument over which was selling the best began in earnest. The Wii was rapidly catching up to the Xbox 360's head start, with *Edge* reporting "widespread stock shortages". The PS3 was doing less well, with *Edge* reporting sales that were "substantially lower than those of PS2" at the same point in its life. *Edge* also reported that Sony Computer Entertainment America president Jack Tretton offered an *Electronic Gaming Monthly* interviewer $1,200 if they could find a PS3 that had been on shelves for more than five minutes, only to be told that half of the 18 stores called had PS3 consoles in stock – some as many as 20. "Tretton's remarks were instantly received as either insular corporate naivety at its worst or a bare-faced lie," said *Edge*.



» [PlayStation 3] Sega knows what tennis needs – a curling mode. Surprisingly, this works well.

No matter which machine you bought, *Virtua Tennis 3* was a critical smash. Sega's sports sequel earned scores of 9/10 in *Official Xbox 360 Magazine*, 9/10 in *PSU3*, 91% in *Play*, 8/10 in *Official PlayStation Magazine*, 8/10 in *X-360*, 8/10 in *Edge* and 4/5 in *360*. *Edge* felt that it was a "deeper, more serious and demanding beast than before, yet happily manages to retain the series' lighthearted atmosphere". *Official PlayStation Magazine* criticised the lack of online play on PS3, saying that "the fact that the Xbox 360 version has online multiplayer makes it hard to stomach". The *Official PlayStation 2 Magazine* gave the PSP version 8/10, criticising the character models but feeling that the game was otherwise "visually impressive". On the Xbox 360, a port of *Guitar Hero II* (5/5 *360*, 9/10 *Official X360*, 8/10 *X-360*) impressed, but drew the ire of

X-360 for "trying disgracefully to squeeze every last penny out of 360 gamers" by selling tracks from the original *Guitar Hero* as DLC.

Another return was even more excited for PS2 owners. "*God Of War II*'s finest achievement [...] is not its combat, its story or its setpieces, but its seamlessness," said *games™* in a 10/10 review. "This is what the modern single-player videogame strives to be, a linear journey from beginning to end, a tale told with impeccable skill and panache, a milestone." *Edge* wasn't as impressed with Kratos' second adventure and gave it 7/10, claiming that it "*feels* slightly stretched during its final third, exposing its shallowness a little in the process". Overall, the consensus tended more towards the *games™* view – *Official PS2* had an exclusive review the month prior, and gave it 9/10. Also on PS2 was a port of *Grand Theft Auto: Vice City Stories* (8/10 *OPM*, 8/10 *Official PS2*, 91% *Play*).

Snowboarding sequel *SSX Blur* impressed on the Wii, scoring 88% in *Official Nintendo Magazine*, 9.0/10 in *nRevolution* and 8/10 in *games™*, which said that the new motion controls "don't exceed that of a more conventional control scheme, but do allow *Blur*'s snowy peaks to feel fresh once again". Konami's innovative find-and-zap game *Eledees* scored 82% in *ONM* and 9.3/10 in *nRevolution*, with the former feeling impressed by the game's "originality and thorough use of the Remote" and the latter calling it a "beautifully made oddity" that "just couldn't be done on any other console". On the DS, *Boktai* spin-off Lunar Knights scored 83% in *ONM*, 8.6/10 in *nRevolution*, 8/10 in *games™* and 7/10 in *Edge*, with *ONM* noting that it was "more focussed on battling" than *Boktai* and was "a little like an isometric *Castlevania*".

On PC, first-person shooter *STALKER: Shadow Of Chernobyl* impressed *games™* and *PC Gamer*, which gave it 9/10 and 87% respectively. *PC Gamer* felt that "where the game's makers fail in the specific story of your character, they excel in telling the bigger story of survival in the Zone". *Trackmania United* earned 87% from *PC Gamer* and 8/10 from *Edge*, which felt that, "ManiaLinks, the big new feature that stops this version being simply a compilation of familiar tracks," was "now also one of the most important models for online gaming". *Command & Conquer 3: Tiberium Wars* scored 82% in *PC Gamer*, which opined that it was "as arcade-feeling as strategy games can get" and "dumb", but felt that it "does everything it can, bar a song and dance routine, to entertain you".

Could a game to turn the PS3's fortunes around be near? Come back next month to find out.

» [Wii] Contrary to *nRevolution*'s prediction, *Eledees* rarely appears in lists of the best Wii games today.

» [Xbox 360] Was *Guitar Hero II*'s DLC a rip-off? It certainly didn't stop future games relying on it.

» [PlayStation 2] Kratos is back and he's predictably angry. Fortunately, it makes for a fine game.

CHARTS

APRIL 2007

XBOX 360

1 – **Crackdown** (Microsoft)
2 – **Gears Of War** (Microsoft)
3 – **Lost Planet** (Capcom)
4 – **Rainbow Six: Vegas** (Ubisoft)
5 – **Battlestations: Midway** (Eidos)

WII

1 – **WarioWare: Smooth Moves** (Nintendo)
2 – **Wii Play** (Nintendo)
3 – **Excite Truck** (Nintendo)
4 – **The Legend Of Zelda: Twilight Princess** (Nintendo)
5 – **Red Steel** (Ubisoft)

PC

1 – **Supreme Commander** (THQ)
2 – **The Sims: Life Stories** (EA)
3 – **Arma: Armed Assault** (505 Games)
4 – **World Of Warcraft: The Burning Crusade** (Vivendi)
5 – **The Sims 2** (EA)

MUSIC

1 – **Give It To Me** (Timbaland ft. Nelly Furtado & Justin Timberlake)
2 – **Stop Me** (Mark Ronson ft. Daniel Merriweather)
3 – **Girlfriend** (Avril Lavigne)
4 – **(I'm Gonna Be) 500 Miles** (The Proclaimers/Brian Potter/Andy Pipkin)
5 – **Beautiful Liar** (Beyonce & Shakira)

THIS MONTH IN...

Official Xbox 360 Magazine

UEFA Champions League 2006-2007 has a new mode called Ultimate Team, but, "The clumsy interface and threadbare chemistry mechanic firmly place it into the realm of gimmick, rather than killer feature."

Edge

A preview commented on the ambition of a studio "attempting an RPG epic as its first game, choosing to adapt the works of a Polish author as yet untranslated into English". Yes, it's CD Projekt with *The Witcher*.

nRevolution

Manhunt 2 is Wii-bound, and *nRevolution* anticipates problems. "If doing these actions simply by pressing buttons generated controversy, surely making the actual motions will drive the same people bonkers?"

SECRETMODE The Chinese Room

LITTLE ORPHEUS

JOIN OUR BOLD YET HAPLESS HERO AS HE EXPLORES LOST CIVILIZATIONS, UNDERSEA KINGDOMS, PREHISTORIC JUNGLES AND LANDS BEYOND IMAGINATION.

OUT NOW

SECRETMODE

ETERNAL THREADS

A SINGLE-PLAYER, FIRST-PERSON STORY-DRIVEN PUZZLE GAME OF TIME MANIPULATION, CHOICE AND CONSEQUENCE.

OUT NOW COMING SOON TO CONSOLES

SECRETMODE The Chinese Room

DEAR ESTHER

A STUNNINGLY REALISED WORLD, A REMOTE AND DESOLATE ISLAND SOMEWHERE IN THE OUTER HEBRIDES.

OUT NOW

SECRETMODE

ZOOL REDIMENSIONED

EXPLORE VIBRANT RETRO LANDSCAPES AND TAKE DOWN MENACING BOSSES IN A MODERN REIMAGINING OF THE CLASSIC PLATFORMING ADVENTURE ZOOL.

OUT NOW

SECRETMODE

HER MAJESTY'S SPIFFING

JOIN CAPTAIN FRANK LEE ENGLISH AND HIS TRUSTED COLLEAGUE, ALED, AS THEY TRAVEL THROUGH THE COSMOS IN SEARCH OF PLANETS TO CLAIM FOR A NEW GALACTIC BRITISH EMPIRE!

OUT NOW

SECRETMODE

MARS HORIZON 2 THE SEARCH FOR LIFE

LEAD YOUR SPACE AGENCY IN THE SEARCH FOR LIFE IN THIS AUTHENTIC STRATEGY SIMULATION GAME. INVESTIGATE THE SOLAR SYSTEM AND COLLECT EVIDENCE OF LIFE.

COMING SOON

SECRETMODE

WOBBLEDOGS

A 3D PET SIMULATION WHERE YOU RAISE YOUR OWN PERSONAL HIVE OF MUTATING DOGS, PHYSICALLY SIMULATED ALL THE WAY DOWN TO THEIR GUTS!

OUT NOW

SECRETMODE

TURBO GOLF RACING

AN ACTION-PACKED FUSION OF RACING AND GOLF. TRAVERSE ACROSS A DIVERSE RANGE OF COURSES, USING YOUR CAR TO SKILLFULLY PUTT YOUR BALL IN THE HOLE.

OUT NOW

SECRETMODE

SNAKE PASS

SLITHER, COIL AND CLIMB YOUR WAY TO THE TOP OF HAVEN TOR IN THIS ONE OF A KIND PHYSICS BASED, PUZZLE PLATFORM ADVENTURE.

OUT NOW

SECRETMODE

A LITTLE TO THE LEFT

A COZY PUZZLE GAME THAT HAS YOU SORT, STACK, AND ORGANIZE HOUSEHOLD ITEMS

OUT NOW

SECRETMODE

STAMPEDE: RACING ROYALE

AVOID ELIMINATION AND FIGHT YOUR WAY TO THE FRONT OF THE HERD IN THE SCRAMBLE TO BE CROWNED CHAMPION!

COMING SOON

SECRETMODE

LODDLENAUT

PICK UP TRASH, EXPLORE THE VIBRANT WATERS, AND TAKE CARE OF AXOLOTL-LIKE ALIEN CREATURES!

OUT NOW

SECRETMODE The Chinese Room

STILL WAKES THE DEEP

NAVIGATE A COLLAPSING OIL RIG TO SAVE YOUR CREW FROM AN OTHERWORLDLY HORROR ON THE EDGE OF ALL LOGIC AND REALITY.

COMING SOON

SECRETMODE

PARCEL CORPS

RIDE ALONG WALLS, GRIND RAILS, AND STARTLE PIGEONS ON YOUR WAY TO CORPORATION-TOPPLING DOMINATION.

COMING SOON

SECRETMODE

MAKE WAY

SPEED AROUND LOOPS, DRIFT AROUND HELTER SKELTERS, AND UNLEASH WACKY WEAPONRY IN THIS MODERN TAKE ON CLASSIC TOP-DOWN MULTIPLAYER RACING GAMES.

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SECRET MODE

Krillys

SCRAMBLE HITS THE ORIC

» ORIC-1 » 1984 » ORPHEUS

I don't have many recollections of the Oric-1, largely because I didn't have any friends who owned one when I was growing up. I do have some knowledge of the system, though and it's largely thanks to my mum. Well, not my mum, but one of her old boyfriends. He actually had an Oric-1 and he had a fair few games for it. He had no kids that I know of, so he clearly just liked playing videogames.

I can't for the life of me remember his name, but I can certainly remember some of the games he owned, including a *Defender* clone called *Defence Force*, *Painter*, A & F Software's take on *Amidar* and a *Pac-Man* rip-off called *Ghost Globber*. Whoever he was, he clearly liked arcade games, and *Krillys* was one of the best that he owned.

Credited to John Cumming, Ian Marshall and Gary Monroe, it's an exceptionally polished clone of *Scramble* that blew me away as an 11-year-old child and I'd always ask whatshisname if he would put it on for me whenever we were visiting.

I think what really impressed me about *Krillys* was just how fast it felt at the time. Sure, playing it today highlights that it's a lot more flickery than I remember it to be, but it still moves at a decent pace and the screen is often littered with enemies to avoid, which makes its coding even more impressive.

Structurally it's very similar to *Scramble* with the same mechanics – so you need to avoid or shoot down incoming obstacles, while taking out fuel canisters to top up your fuel. It has all the level variations of the arcade game as well and really highlights what was possible on Oric hardware. Weirdly, despite its popularity in arcades, *Scramble* never received many official conversions at the time, which probably explained why developers were happy to push clones like *Krillys* onto the market. If I'd be an Oric owner at the time, *Krillys* would have easily made my birthday list.

INSIDE THE ATARI 2600

STEVE CARTWRIGHT
BARNSTORMING, MEGAMANIA, FROSTBITE AND MORE

DAVID CRANE
PITFALL!, CANYON BOMBER, CIRCUS CONVOY AND MORE

JON MIKULA
MR RUN AND JUMP

ALEX PIETROW
ASTRONOMER, MONKEY KING

BOB POLARO
DEFENDER, DESERT FALCON, BUGS BUNNY AND MORE

» [Atari 2600] *Combat* is the Atari 2600 used as intended, and looks exceptionally basic compared to later games.

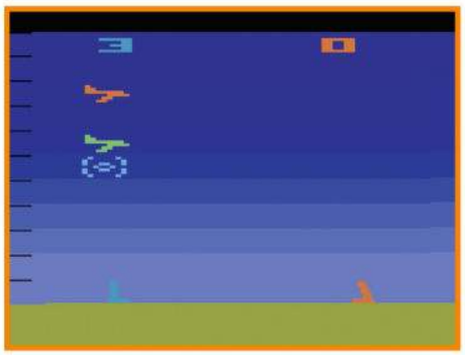
ATARI'S SEVENTIES CONSOLE MIGHT HAVE BEEN A SMASH HIT WITH PLAYERS, BUT ITS UNIQUE HARDWARE AND SEVERE LIMITATIONS POSED A NOTORIOUSLY TRICKY CHALLENGE FOR DEVELOPERS. WE SPEAK TO CODERS PAST AND PRESENT TO EXPLAIN JUST HOW THE SYSTEM WORKS

WORDS BY NICK THORPE

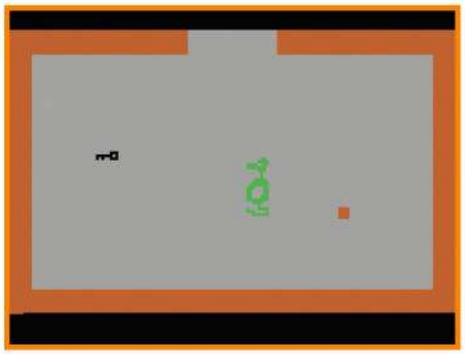
True revolutions in the field of game-console engineering are a rarity, but there's no doubt that the Atari 2600 fits the bill. The earliest home consoles had been dedicated *Pong* consoles and similar devices, which were designed to play only the games that they were built for, with no capability for expansion. The Atari 2600 was a completely different proposition, with its use of a programmable CPU and ROM cartridges allowing for a theoretically unlimited number of games. Though Atari's console wasn't the first to offer this capability – the Fairchild Channel F claimed that distinction in 1976 – it did popularise the concept, selling millions of units and setting the standard for how future gaming hardware worked.

The concept for such a console originated at Atari's subsidiary Cyan Engineering, but the hardware required to create it as a consumer product didn't become affordable until the mid-Seventies. In September 1975, a team at MOS Technology headed by former Motorola engineer Chuck Peddle introduced the affordable 6502 CPU, which cost just $25 ($143, adjusted for inflation). As well as being more affordable than competing processors from Intel and Motorola, which had been introduced at $360 each ($2,060 today), it was more capable. However, even at $25 the 6502 was too expensive for a home console, and Atari ultimately negotiated for the cost-reduced variant 6507 CPU and 6532 RIOT chips at $12 a pair.

The graphics hardware, originally codenamed Stella after Joe Decuir's bike, was also developed at Cyan. Jay Miner ultimately finished this while Joe Decuir worked on the rest of the system, and it was named the Television Interface Adapter. Due to the high price of RAM – $195 ($1,116 today) for four kilobytes in October 1975 – this chip doesn't include a framebuffer, which is memory that graphics are typically written to before being drawn to the screen. This allowed for a high level of flexibility, but also placed a major burden on programmers. The Atari 2600 launched in September 1977, at a price of $199 ($1,011 today).



» [Atari 2600] The trick of reusing player sprites was in use as early as *Air Sea Battle*.



» [Atari 2600] Graphics on the console sometimes had to be rather abstract, as *Adventure*'s dragon shows.

» [Atari 2600] The fact that *Warlords* handles up to three computer players is a minor miracle.

» [Atari 2600] *Donkey Kong*'s asymmetrical girder layout requires rewriting playfield data mid-scanline.

What did the design decisions mean in practical terms? "The 6507 was in a smaller IC package that cost a little less. It still had a full 6502 die inside, but there weren't enough pins to bring all of the lines of the 6502 to the outside world," says David Crane, whose Atari 2600 games include *Pitfall!*, *Outlaw* and *Circus Convoy*. "Three of the lines they left disconnected were address lines that allowed the 6502 to address 64KB of memory. Abandoning those address lines limited the 6507 to access 4KB in the ROM slot. The designers of the 2600 never planned on ROMs bigger than 4KB, so it seemed to be no big deal." Indeed, the earliest games such as *Combat* and *Indy 500* shipped on 2KB ROM chips. "It became a problem as games needed larger ROMs, leading to more and more complex bank-switching schemes to allow 8K and larger games," David recalls.

Bob Polaro, programmer of games such as *Defender, Road Runner* and *Rampage,* remembers the development tools used at Atari.

"Along with downloading to a 2600 connected to a TV, there was the HP 1611A Logic Analyzer and DEC PDP-11 console station," he says. For debugging, "the Logic Analyzer was the most useful tool, which would display the cycles used as well as a specific hardware register's value." Steve Cartwright, who programmed games such as *Barnstorming*, *Frostbite* and *Megamania*, remembers a similar environment. "At Activision we used a custom-built hardware emulator connected to a modified 2600. Software was a custom-built assembly language assembler and debugger. We used ADM3A dumb terminals connected to a PDP-11."

> "IT WOULD LITERALLY TAKE MONTHS TO WRITE THE CODE TO DISPLAY ALL THE MOVING OBJECTS"
> **STEVE CARTWRIGHT**

What was the hardware emulator connected to the console? "The simplest way to develop a game for any ROM-based game console was to use a ROM Emulator, which could be wired to the cartridge slot as if it was a ROM in a plastic cartridge. We would occasionally use this commercially available technology when we started working on a new console," says David. "Then, as quickly as we could, we would make a development system, or blue box, specifically for the system. This meant designing a custom circuit and circuit board. I made many such systems over the years and usually used a modular aluminium project box as an enclosure. The brand I used had blue powder-coated metal parts which is where the term 'blue box' came from," he continues. "The blue box I designed at Activision for the Atari 2600 connected to the cartridge slot, but with RAM directly wired into the CPU's address space. The RAM still pretended to be the cartridge but it was more easily uploaded with test code and also allowed for special debugging tools."

» [Atari 2600] Scrolling was tough for the Atari 2600, but games like *Defender* approximated it well.

» [Atari 2600] Activision's games frequently looked excellent, with highly detailed characters and backgrounds.

David goes on to detail the functions of the custom software Steve mentioned. "We actually had pretty good tools because we wrote them ourselves," he says. "The software in the blue box allowed us to temporarily modify game code or RAM variables during play. But far more important was the ability to set breakpoints in the execution thread to freeze time and inspect the code flow one instruction at a time – a process that was otherwise happening in microseconds. Modern debugging tools are not better, they are just integrated into a development environment with such features as auto-compile [and] multiple screens."

Graphics were the trickiest part of creating Atari 2600 games. Because of the lack of a framebuffer, the TIA chip draws graphics line by line, and on each scanline there were a limited number of resources. You had one fixed background colour, as well as a 20-bit

» [Atari 2600] *Megamania* features smooth enemy movements in various directions, which is quite impressive.

UNDER THE HOOD

TAKE A PEEK AT THE MOTHERBOARD OF ATARI'S CLASSIC CONSOLE

TIA

1 The TIA, short for Television Interface Adapter, is the chip that provides the graphics and sound capabilities for the console. This chip is also included in Atari 7800 consoles for backwards compatibility and sound generation.

MOS TECHNOLOGY 6507

2 A MOS Technology 6507 chip serves as the CPU of the Atari 2600. This is a cost-reduced version of the 6502, which is used in Atari's 8-bit computers, the Commodore 64 and many other systems.

MOS TECHNOLOGY 6532

3 The MOS Technology 6532 is an integrated chip that holds 128 bytes of RAM, handles input and output and provides a programmable interval timer. It's nicknamed RIOT (RAM, IO, Timer).

CARTRIDGE SLOT

4 This is the cartridge slot. On six-switch consoles this is mounted at an angle, but on four-switch consoles the motherboard itself is angled instead, so the cartridge slot is mounted normally.

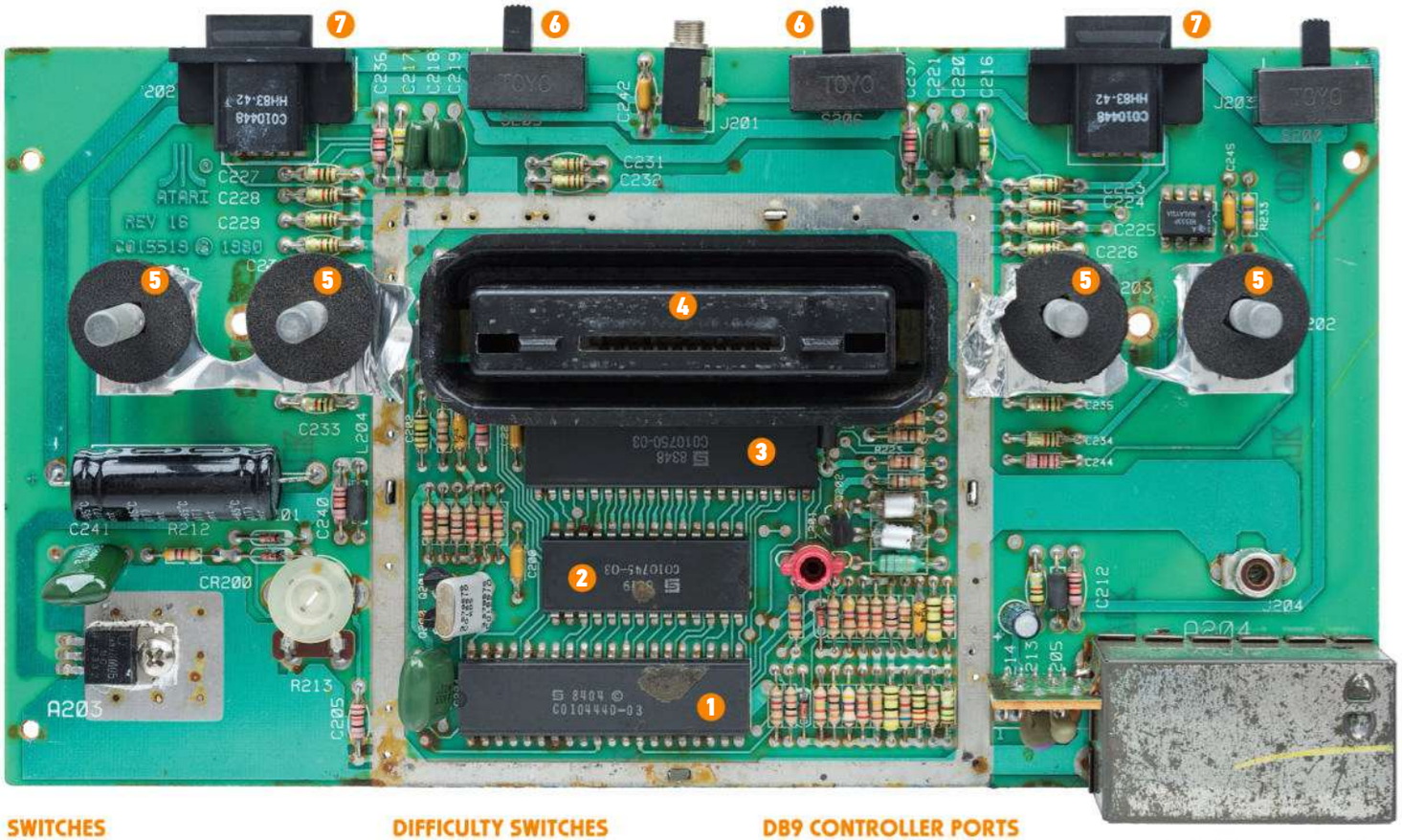


PHOTO BY EVAN AMOS

SWITCHES

5 These are the Power, TV Type, Game Select and Game Reset switches. On six-switch consoles they are mounted on their own board, but the four-switch motherboard seen here has them integrated.

DIFFICULTY SWITCHES

6 The Left Difficulty and Right Difficulty switches originally sat on a separate board with the other switches, but were moved to the rear of the console when the four-switch model was introduced.

DB9 CONTROLLER PORTS

7 The two DB9 controller ports are part of the motherboard on all models. On the six-switch systems they're close together and horizontally orientated, but far apart and angled on four-switch consoles.

ANATOMY OF A PITFALL!

HERE'S HOW DAVID CRANE MADE CLEVER USE OF THE CONSOLE'S CAPABILITIES TO CREATE THIS GRAPHICALLY IMPRESSIVE GAME

HEADS-UP DISPLAY

1 Since no other game elements share this part of the screen, player sprites can be used to display the timer, score and lives remaining.

BACKGROUND MIRRORING

2 The Atari 2600's background graphics register holds enough information for half a screen, which is then mirrored or repeated. In *Pitfall!*, it is always mirrored – any asymmetrical elements use sprites.

BACKGROUND COLOURS

3 The background can only have two colours on any scanline – but as you can see, these colours are changed as the screen is drawn to create the trees, the ground and the water, and the underground.

TREE BRANCHES

4 The background graphics are too coarse to draw fine details, and both colours are already used. Since Harry and the enemies never occupy this region of the screen, player sprites are used here.

VINE

5 The ball sprite is used to draw this, as it is independent of player sprites. Notice that because it has to share the background colour, the top of the vine is green until the tree trunks are drawn.

HARRY

6 Harry is the most complex graphical element on the screen. The player sprite's colour is changed to represent his hair, skin, top and trousers. Note that his hands are in line with his head, and his knees don't come up past his waist.

CROCODILES

7 Since Harry will occupy the same space as them and interact with them, the crocodiles use the second player sprite. The limitations of sprite repeating mean they appear at fixed distances.

SCORPION

8 The second player sprite is changed to the scorpion for the underground. Only one non-Harry sprite ever appears in each region of a screen, so you'll never see both a scorpion and a wall, for example.

ACTIVISION LOGO

9 Once again, the background graphics are far too coarse for this text, so both sprites are used in alternating fashion to draw it. While one sprite is drawn, the other is being altered.

HMOVE AREA

10 *Pitfall!* should suffer from HMOVE lines, but gets around it by simply writing to that register on every scanline to create a solid black bar. Many Activision games used a similar technique.

playfield of a single colour. The playfield only covered half of the screen, and had to be mirrored or repeated on the right. Two eight-pixel player sprites were available, each of which could have their own colour, as well as two one-bit missile sprites which shared the colour of their respective player. Then there was the ball sprite, another one-bit sprite which shared the playfield colour. The data in these registers had to be updated for every scanline to draw complex graphics.

Most of the CPU time, 76 cycles per scanline, was spent driving the TIA. "It was *extremely* limiting, and severely restricted what the game could display. For most games the first third or more of the development schedule was dedicated to using those 76 cycles to display an acceptable game screen," says David. Steve remembers the creation of graphics being similarly intensive. "It would literally take months to write the code (the 'kernel') to display all the moving objects," he tells us. "*Megamania* was, at its time, the most complicated kernel ever attempted. There were multiple rows of multiple objects moving both horizontally and vertically – with the 'ball' object (the player's missile) and two enemy missiles passing vertically through all the moving and scrolling rows of enemy ships."

How was it possible to create multiple rows of objects with just five sprites, three of which were extremely limited? "There were registers called NUSIZ0 and NUSIZ1 that were used to control the sizes and number of copies for each player," says Bob. These allowed for up to three copies of the same sprite per scanline, or a single enlarged version of one. "If you made triple copies and changed the values within the kernel at the right cycle time you can make what was called the six-character score kernel." The missile and ball sprites could also be stretched, which Bob used for the missile firing in *Defender*. In David's opinion, these capabilities were invaluable. "Stretch and multiple copies of sprites was an afterthought in the hardware design, but without those the 2600 would have been obsolete in two years rather than the more than ten years that it was able to compete with newer systems," he explains. "Without those features, 2600 games would all look like *Tank*."

» [Atari 2600] Steve Cartwright was able to animate Activision's famed sunset gradient in *Frostbite*.

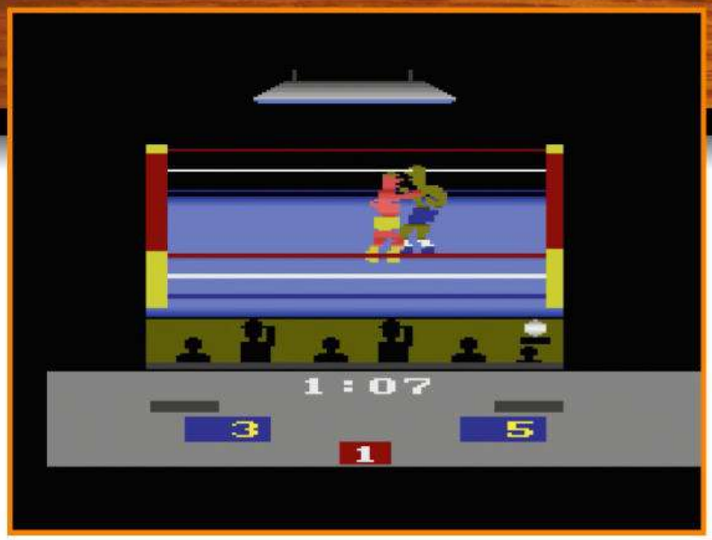
» [Atari 2600] *Pole Position* makes clever use of the missile and ball sprites to draw its roads.

> "ON THE ONE HAND WE HAD A LOT OF CONTROL OVER THE DISPLAY ON THE TV. ON THE OTHER HAND EVERY CHOICE COULD SIGNIFICANTLY RESTRICT OTHER ASPECTS OF THE GAME"
> **DAVID CRANE**

Though a player sprite and its copies could appear only once per scanline, they could appear multiple times per frame, with the data being changed as the screen was drawn. However, this caused a peculiar graphical quirk. "HMOVE was the register that moved the players," Bob tells us. Whenever this register was written to, a black line would appear on the left of the display. "I remember storing a zero in the leftmost bit of the playfield to cover up the unsightly HMOVE lines." Other games would simply write to HMOVE on every scanline, creating a solid bar on the left of the screen.

The real-time nature of the TIA even allowed for the ability to change the playfield data while a scanline was being drawn, in order to achieve an asymmetrical background. "The drawback is that doing so used up about half of our precious 76 cycles, and it severely limited what else could be displayed in that area of the screen," David explains. "It also used up a lot of the 128 bytes of RAM. On the one hand we had a lot of control over the display on the TV. On the other hand every choice could significantly restrict other aspects of the game." Nevertheless, this did see real-world use – *Donkey Kong*'s first stage would have been impossible without it, as would the desert background of Bob's *Road Runner*. "*Barnstorming* is a typical example – the body of the plane is actually a playfield object," says Steve. "After the plane is drawn on the left side of the screen, the playfield register is cleared so the plane doesn't re-appear on the right side of the screen."

Activision's games typically had exceptional graphics, and this was no accident. "At Activision it was not unusual for a game idea to be abandoned if the designer/programmer couldn't get a top-notch game display to work to our high standards (such as avoiding flicker etc)," David remembers. "Only after figuring out how to make the display work would we invest the time and energy to write the gameplay code." Steve says the company used "the cheapest Montgomery Ward TVs we could buy" during development, explaining



» [Atari 2600] Vertical colour changes in sprites are more common than horizontal ones due to the hardware.

» [Atari 2600] Later games like *Solaris* really pushed the console with smoothly moving space battles.

that, "The theory was that if we could make the colours look good on those TVs, the games would look great on any customer's TV." This was apparently not a universal practice, as Steve elaborates. "Atari, on the other hand, developed their games using hi-res Sony colour monitors. As a result, when customers got the games home, there was often annoying colour bleed and colour artefacting on 'average' TV sets that hadn't shown up on their hi-res colour monitors."

So with such intense activity directed towards graphics, where does the game logic happen? "You get 30 scanlines worth of overscan, and nothing's getting drawn there so that's just free space where your program can do kind of a lot of heavy lifting" says Jon Mikula, programmer of new Atari release *Mr Run And Jump*. "Then once it's done with overscan, it's vertical blank, which is the cathode-ray tube resetting itself to the top-left corner of the screen. So that winds up being another big chunk of time. So between overscan and VBlank, that's the meat of where your game code is running," he continues. "So that's where I handled collision, level loading, movement, reading inputs, playing sounds and all that kind of good stuff. And there is time when it hits the right side of the screen and it goes to the left, and that's called horizontal blank. That gives you another few cycles for which you can eke out some more code if you really wanted to."

» [Atari 2600] *Fatal Run* was a 32KB cartridge – eight times what the console was designed to handle.

"Because all resources were extremely limited we had to make trade-offs," David recalls. "For example, you could speed up the code by writing in-line code, but using a loop used less ROM. Every trade off decision was based on what resource was slightly more available. But that is all relative – there was never enough ROM, RAM, or CPU time to do everything we wanted," he continues. "One trick every game used was the combining of data tables. Since memory was so limited, if a data table ended with the same number that another table started with, we'd overall the tables slightly to save even 1 or 2 bytes," says Steve. "We were always so desperate for resources that one byte could make a difference," David tells us.

> "THE COMMUNITY IS VERY ACTIVE, FRIENDLY AND GENERALLY WELCOMING TO NEWCOMERS"
> **ALEX PIETROW**

One thing that we haven't mentioned much is sound, which is generated by the TIA and extremely limited – this is unsurprising, given that the console was designed at a time when background music wasn't even common in arcade games. That said, having music wasn't an impossibility, as David's later game *Skate Boardin'* shows. "The 'music' playing during *Skate Boardin'* was a simple baseline and snare drum, and used only the built-in capabilities of the 2600. A short burst of white noise sounds like a snare drum, and the 2600 sound circuit could play beeps and bloops. Only a fraction of the tones from the 2600 were chromatic, ie real notes," he explains. "That type of music took very little CPU time… a note would be started on one frame and turned off the next, creating a short tone.

"The biggest challenge in creating a ditty on the 2600 was writing a song using only eight or so notes. That said, a very talented composer can do it. For Garry Kitchen's *Pressure Cooker* a professional jingle writer was hired to write game music. Garry told him to write anything that fit the game theme, but use only the eight notes marked on his toy Casio keyboard. I wish I could have been there to see his face! The end result was brilliant."

The story of the rise and fall of the Atari 2600 and its connection to the North American videogame market crash is exceptionally well-known, but what is discussed less often is that the console did benefit from the market's recovery. "We developed and published *Skate Boardin'* under the Absolute Entertainment label because Toys R Us reached out us to say that they were receiving a significant number of requests for new 2600 games after the game business recovered from the crash," David explains. "By that time not even Atari had retained the expertise to make games for the 2600 and we had several OGs in the company that could oblige." Development of new games continued until 1990, with *Fatal Run* and *Klax* being the final releases.

Even then, the story of Atari's console wasn't over. The popularity and unique design of the Atari 2600 inspired hobbyist coders to create their own Atari 2600 games, and there's a thriving homebrew scene today. "I like it because it is such a challenge to make games on this platform," says Alex Pietrow, programmer of *Astronomer* and *Monkey King*. "You have some very strict limitations that you have to deal with, and that means that you have to be creative with your solutions. Of course, this also applies to modern games in some ways but that industry has ballooned so much over the years that you have to have large budgets, and teams of people to get things done, while this can still be managed by one person. The community is very active, friendly and generally welcoming to newcomers, so that was also a motivator for sure."

FLICKER FACTOR

WHAT'S BEHIND THE FLICKERING SPRITES YOU SEE IN SOME ATARI 2600 GAMES?

With just five hardware sprites to play with, and three of them carrying heavy restrictions, the Atari 2600 posed a considerable challenge to anyone seeking to convert more complex arcade games with plenty of moving parts. Fortunately, the Atari 2600 allowed for the replication and reuse of sprites, greatly easing this burden. By using the debug features of the emulator Stella, we can see how programmers got maximum utility from these features, and learn why flickering was sometimes unavoidable.

SPACE INVADERS

Both player sprites are employed to draw the enemies. Each sprite is drawn three times per row for a total of six enemies. Wide spacing is used so that data can be swapped out between each drawing. Shots use the ball sprite and can overlap, so player and enemy shots are flickered.

REGULAR DEBUG

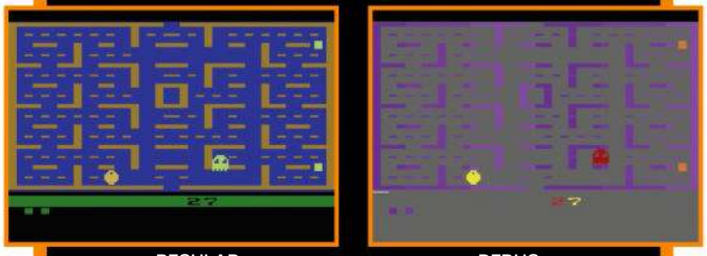
FROGGER

This complex game area features rows of multiple objects, and again uses both player sprites to draw vehicles, logs and more. But since Frogger himself is a player sprite, flickering the row he occupies is a necessity – Frogger and Lady Frog are drawn on one frame, the objects on the next.

REGULAR DEBUG

PAC-MAN

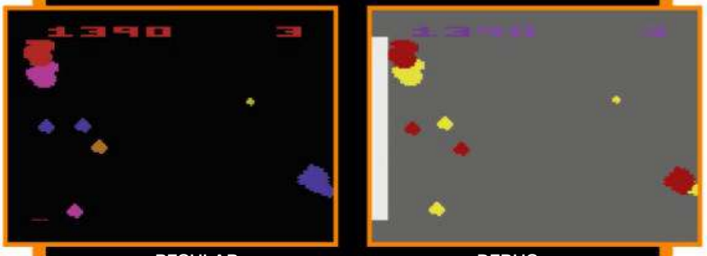
The ghosts here can't use replication as they need to move independently, and they may all appear on the same scanline as Pac-Man. To get around this problem, the game simply draws a single ghost during each frame, producing the prominent flickering effect that the game is infamous for.



REGULAR DEBUG

ASTEROIDS

Since both the player and asteroids can occupy any part of the screen, full-screen flickering is utilised with the player drawn on one frame and the asteroids drawn on the other. Both player sprites are used for the asteroids, with size and colour modified repeatedly as the screen is drawn.



REGULAR DEBUG

BACKGROUND PLAYFIELD PLAYER 0 PLAYER 1 MISSILE 0 BALL HMOVE LINES

EXTRA CHIPS

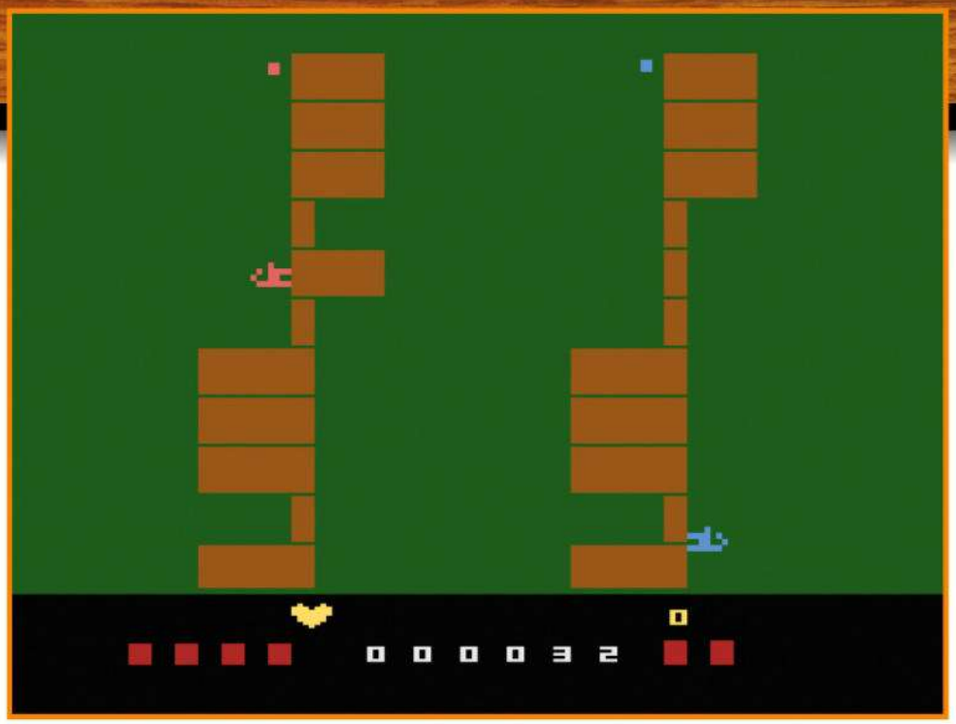
COULD ADD-ON CHIPS PUSH THE ATARI 2600 EVEN FURTHER?

One of the advantages of cartridge-based games is the ability to add extra processing power with on-board chips. Though many players would become familiar with this in later years thanks to examples like the Super FX used in SNES games, David Crane actually did so early on with *Pitfall II: Lost Caverns*, which arrived when the Atari 2600 was already over six years old. "Designing a custom IC to go into the cartridge was my attempt to squeeze a couple more years of life out of our beloved 2600," David explains. "It certainly added cost (although I don't know how much) so it made sense to use for a blockbuster like *Pitfall!*'s only 2600 sequel, but might be hard to justify for a lesser title.

"It was called the DPC for Display Processor Chip, but as a lover of word play, it was actually named using my initials. It let us squeeze eight or ten cycles out of our real-time code, effectively expanding what we could do in our 76 cycles. It also gave us three-voice music that made the *Pitfall II* theme music possible." *Pitfall II* exceeded Activision's sales expectations despite the major downturn in the console market and a relatively high retail price of $34.95, but the DPC was never used in any further releases. "I would have loved to use it again to see what more I could make my design do, but that was pretty much the end of top-of-the-line 2600 game design," says David.

» [Atari 2600] *Pitfall II*'s jaunty theme music wouldn't have been possible without the Display Processor Chip.

» [Atari 2600] *Pitfall II* had smooth vertical scrolling, unlike the first game's flick-screen action.



» [Atari 2600] Alex Pietrow uses Batari Basic, which is useful for those starting out in Atari homebrew.

Jon feels similarly. "I kind of took on *Mr Run And Jump* as a programming challenge, because the 2600 is this notoriously finicky, difficult to work with platform to develop for," he tells us. "What makes it appealing to work for it is the scale of it. It's a platform that you don't necessarily have to make a ton of assets for, you don't have to worry about making textures and being a good artist, or necessarily composing music and pumping those out to files and things like that, it's all very raw programming."

The community forum AtariAge is an extremely important resource for Jon. "They have a whole section on homebrew development, and I believe there's a post somewhere on how to get started. They have a collection of stuff, so you can get the linker which you pump your assembly code into, and then that spits out your 2600 executable. So that's just available for download up there. There's another post where someone broke down how to write assembly code for the 2600 processor." Older resources have also proven useful to him. "The actual Stella manual from the Seventies, that's a surprisingly great resource. You'd think maybe it would be slightly out of date or written weirdly, but it's very readable and actually extremely direct." When asked what resources he uses, Alex tells us, "The main one is the AtariAge forums, where there are many people who know a lot about the system and how to program for it. Also, the website randomterrain.com is very helpful."

» [Atari 2600] *Mr Run And Jump* is the first new official cartridge game that Atari has released in decades.

While Jon went straight down the assembly code route, Alex has taken a different approach. "As of yet I only work with Batari Basic, which is an introductory programming language for the Atari 2600 that makes it a lot easier to program things," he explains. "Of course it also limits what you can do, but one has to start somewhere!" However, even with an introductory language, the limits of the system prove tricky due to the limited amount of variables and memory available. "You need to use various tricks to get around what you are doing, like using the individual bits of a variable in order to store eight Booleans in one variable," he explains. "You also learn binary math tricks to make calculations less taxing and minimise the amount of variables that they use. Some of these tricks I actually use in my day job now, where I work with large amounts of astronomical data."

Even David has returned to the Atari 2600 in recent years, developing *Circus Convoy* with Garry Kitchen. How did this compare to the old days? "First and foremost it was as challenging as before, which as I have said was the most fun part," he replies. "But creating *Circus Convoy* entailed much more than writing game code. To bring you *Circus Convoy* in a physical cartridge, complete in a beautiful colour box with manual etc, meant recreating all of the subsystems that we had 40 years ago.

"Long gone were our debugging tools, our drawing tools, SFX tools, etc. So I first had to

recreate many of those. I put a good three to four months into a 2600 sprite-drawing tool that let you use all of the capability of the hardware. Between the two of the original founders of Audacity Games I am the more technical and Garry is by far the more artistic. I let him loose with that tool and he created sprites unlike any that have ever been seen. For example, the giraffe that pokes his head out of the circus car has some of the most innovative uses of colour on a 2600 sprite and the player doesn't even notice because it just looks perfect. And the snake that takes up a third of the screen – OMG."

» [Atari 2600] The details on the giraffe in *Circus Convoy* are rather extraordinary for the hardware.

» [Atari 2600] *Ms Pac-Man* solved the original's flickering by reusing sprites across different scanlines.

Like many modern Atari 2600 games, *Circus Convoy* has been released on a cartridge, which is no small feat as David explains. "I put on my electrical engineering hat and designed a circuit board to go inside a cartridge. I put on my industrial engineering hat and designed a new plastic case capable of being injection moulded." Further coding outside of the game was also needed. "I envisioned and implemented a number of security features to prevent (or at least reduce) pirating. I built a web store from scratch, created a marketing website, back-end server software, innovative use of QR codes, a global high-score board and compiled a list of people who really wanted to hear from us by email," he adds.

"There was a massive amount of work that went into that copy of *Circus Convoy* sitting on your desk or shelf. It turned out to be a great game (if I do say so myself), and such a great result made all of the work worthwhile and rewarding," David says, before concluding, "comparing it to what it was like in the heyday, we missed the hundreds of Activision staff that took a lot of this workload off the game designers back in the day."

Although Atari 2600 games are simple by today's standards, the process of making them was anything but simple. The pioneering coders of the day saw the restrictions the Atari 2600 imposed and imagined inventive ways to bypass them, creating classics like *River Raid*, *Adventure* and *Yars' Revenge* that were vastly more complex than anything that the team at Cyan Engineering had imagined for the console. We doubt that anyone involved in engineering the Atari 2600 in the Seventies imagined that people would still be developing games for it so many decades later, and we can't imagine that people like David thought that they would be doing that development, but they do. Each one is drawn to console not because it's the best tool for the job, but for the challenge involved in creating something that would be trivial to make on hardware even marginally more modern. We can't think of a better way to pay tribute to the coders of classic Atari 2600 games than to take on that daunting task.

TIA DECLASSIFIED

HOW THE ATARI 2600'S GRAPHICS CHIP DIFFERED AROUND THE WORLD

The Television Interface Adapter had somewhat different capabilities depending on the television system it was designed for. "The hardware and programming were identical until the final step of translating a digital code to colours," says David Crane. "The way the hardware worked, and probably due to cost considerations, SECAM colours were muted and PAL colours showed up at different positions on the colour wheel. We just did our best with the colours that were available." That wasn't too hard for PAL consoles, which have access to 104 colours compared to the 128 of NTSC consoles, but owners of SECAM consoles in countries like France had to make do with just eight colours.

However, as is so often the case when it comes to international gaming hardware, frequency was the problem. "The bigger problem was that both PAL and SECAM used a 50 hertz time base rather than the 60 hertz we worked with in the US," David confirms. "For every game he or she authored, the designer created the alternate versions once the US version was complete. All references to colours had to change, and we had to address the different time bases. Games ran 16% slower and sometimes we had to tweak clocks, timers, and even game rules so that European players could have the same quality gaming experience."

» [Atari 2600] Here's the NTSC version of *Decathlon*, running as it was always intended to run.

» [Atari 2600] There's a colour reduction for the PAL version here, and of course a slightly squashed image.

» [Atari 2600] Here's the SECAM version. It's rather bright, to say the very least.

THE MAKING OF THE ATARI 2600+

ATARI RECKONS ITS FUTURE LIES IN ITS PAST SO, AS WELL AS RELEASING RETRO-INSPIRED GAMES, IT'S GONE ALL-IN WITH A MODERN-DAY RECREATION OF ITS BEST-LOVED CONSOLE. BEN JONES, CREATOR OF THE ATARI 2600+, REFLECTS ON A JOB WELL DONE

WORDS BY DAVID CROOKES • HARDWARE TESTED BY NICK THORPE

When growing up, Ben Jones played on an Atari 2600. "I was born in 1978 so I was six, seven or eight when I enjoyed the console – about halfway through its lifecycle," he says. He recalls its iconic design and the large number of games ("I remember enjoying *Pong* and we had *River Raid*"). But never in his wildest dreams did he ever think he would one day be remaking the machine 46 years after it originally launched.

"I'm really quite taken aback that Atari invited me to be the custodian of what, I would say, was the first mainstream console that had interchangeable cartridges," he says, the excitement still starkly evident on his face. Indeed, as the commercial director of retro at Plaion (formerly Koch Media), Ben has been involved in every single aspect of the design of what has become the Atari 2600+. "I'm still kind of working on it full time," he adds. And this, you sense, is only the beginning.

Atari had been considering a modern-day recreation of the Atari 2600 for some time and its bosses mentioned it when talking to Plaion in April 2022. "We were just having a conversation with them on something separate," Ben says. But, over the course of a couple of months, discussions advanced. Atari made it clear it wanted Plaion to handle the development, manufacturing and distribution of the end product and, by the summer, Ben was fully hands-on with the dream project.

The main thrust of those talks was how you could take a console which first saw the light of day in 1977 and make it sufficiently attractive. After all, it wouldn't be the first stab at recreating the Atari 2600 so it would need to be rather special. "We spent a long time talking about everything to do with the aesthetics of the machine and the software," Ben says. "We also discussed how we'd present it to the public. Everything was really carefully considered."

They quickly cast aside talk of creating a traditional Mini console – one that was much smaller than the original with built-in games – in favour of a slightly smaller machine capable of playing the original Atari 2600 and 7800 cartridges. They also decided to include recreations of the CX40 joystick controller with the same size and layout, and include so-called "modern quality-of-life" features such as USB power, HDMI output and multiple screen resolutions.

Making a more compact machine, however, did have consequences. Although the Atari Video Computer System (VCS), as it was known at launch, had six switches across the top bezel for Power, TV Type, Player Difficulty, Game Selection and Game Reset, the Atari 2600+ needed to adopt the four switches of the version that was released in 1980.

> "ANY SMALLER AND YOU'D HAVE TO START AMENDING THE SHAPE OF THE FACE PLATE – THAT WOULD BE A NO NO"
> BEN JONES

"The Atari 2600+ is only 80% of the original size – any smaller and you'd have to start amending the shape of the face plate and that would be a no no – but the aesthetics of the machine didn't look right with six levers squashed up," Ben explains. "We also had to consider that the cartridge port obviously had to stay the same size but that, in essence, it would grow bigger on the face of the machine." Even so, the aim was still to retain the look and feel of the original console.

To that end, the Atari 2600+ is pretty much what you'd expect. It boasts an authentic woodgrain front panel, carts are inserted into the top and there are DB9 sockets for peripherals both new and old. It's lighter than the original, though, "That one was quite chunky, quite heavy," Ben says, having bought a few as part of his research. It also has a quirky addition: the Fuji Atari logo illuminates in white light whenever it's powered on – evidence of the modern-day Atari's desire to put its own stamp on a latter-day product to some degree.

"The light is a nod to the previously released modern Atari VCS – we have the Fuji logo and the word Atari lit up," Ben smiles, referring to a machine that came out in recent times. "To be honest, it's nice to know that the machine is switched on and a light shows that. It wasn't the case back in the day, but it looks nice."

Driving the machine (at least the 2600 side of things) is the Stella emulator, specifically the latest release, version 6.7. Supported for more than 20 years, it emulates the Atari 2600 extremely well so its use in the 2600+ comes as no surprise. That said, Atari and Plaion could have opted for other potential technologies such as FPGA. The decision not to do so was deliberate.

"Stella is comprehensive. It's such an incredible emulator," Ben says. "And we ▶

» Interested in the Atari 2600+? You can order it using the above QR code.

BEN JONES

BEN JONES IS A LONGTIME FAN OF THE ATARI 2600 AND HAS BEEN OVERSEEING THE ATARI 2600+ PROJECT.

[Atari 2600+] *Asteroids* – the 1979 classic – runs perfectly well on the Atari 2600+.

» [Atari 2600] Modern TVs often struggle with the fuzzy analogue RF video from vintage Atari 2600 consoles.

» [Atari 2600+] You'd definitely cross the road to play Atari games on cart using this machine!

ATARI ADD-ONS
THE PERIPHERALS AND GAMES AVAILABLE AT LAUNCH

MR RUN AND JUMP

This 2D platformer is a new release published by Atari and, as well as being playable on the Atari 2600+, it can also be enjoyed on the original hardware. Originally a homebrew game for the Atari 2600, it has leaped on to other platforms and had many very positive reviews.

CX40+ JOYSTICK

Having set a standard, all those years ago, the classic CX40 has been remade for the modern era. The CX40+ has just the right amount of throw so it retains the slightly stiff feel of the original. The button press also feels more definite than on the old CX40.

CX30+ PADDLE/ GAMES BUNDLE

The original CX30 paddles were and remain a desired purchase for the console. The updated version has a smoother turn to them and are arguably better than the original. You also get four games on a cart: *Breakout*, *Canyon Bomber*, *Night Driver* and *Video Olympics*.

BERZERK ENHANCED EDITION

Berzerk was released in the arcades in 1980 and it ended up being ported to the original Atari consoles. In developing a new enhanced edition, Atari has spruced up the graphics, added robot voices and implemented diagonal firing to create the definite version of the game.

» This ten-game cartridge is bundled with the Atari 2600+. It is supplied in a cardboard slipcase that has a window for dip switches which are required to select the game.

» This cartridge comes bundled with the paddles, making for a worthwhile purchase.

» [Atari 2600+] Games for the Atari 7800, which competed with the NES and Master System, are also supported.

always had the intention of reaching a relatively mass-market price point with the hardware and software which I think we've achieved. If you make a step change to FPGA then it would become considerably more expensive for the average consumer. Yes, there is obviously that enthusiast area that wants FPGA but how big is that market? I'm not quite sure. How big is the market for machines such as this which use emulation? Well, I have a grasp of the size of that market and that was kind of the thinking behind it really."

For 7800 games, the ProSystem Emulator v1.3 is used, although the A7800 emulator was considered. The latter was dropped because it wasn't fully compatible with ARM-based chips, primarily the Rockchip 3128 SOC microprocessor at the heart of the new console. The upshot is that the decisions made have ensured that 99% of past cartridges work with the Atari 2600+. "It's a nice feeling to get that cartridge in your hand and switch on the big lever and see it works," Ben says.

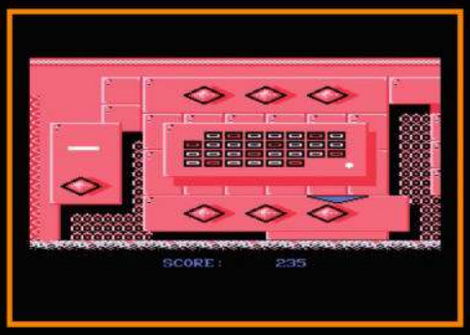
In our testing, there were few problems. Most of our classic carts required a good cleaning before they would co-operate but, when they ran, there were no major graphical issues or sound problems. Both PAL and NTSC games are supported, with appropriate colours displayed for each. The console itself also feels well made. There

> "THERE IS OBVIOUSLY THAT ENTHUSIAST AREA THAT WANTS FPGA BUT HOW BIG IS THAT MARKET? I'M NOT QUITE SURE"
> BEN JONES

are proper metal switches and while the angled joystick/power/HDMI connectors look a little odd today, they are undoubtedly authentic. Buyers get USB-C and HDMI connectors in the nicely packaged box but there's no plug adapter. Likewise, there's a quickstart sheet but no full instructions.

There are some notable games that won't yet work, though. They include *RealSports Boxing*, *Super Cobra*, *The Texas Chainsaw Massacre* and *Pitfall II: Lost Caverns*. To be sure a title didn't fail simply because it was on a dodgy cart, any title that wouldn't work would be tested on an original Atari 2600. This approach has enabled Atari and Plaion to create a solid, comprehensive list of compatible titles. There's also been a great deal of effort involved in fixing as many of the troublesome games as possible ("we're looking at fixing *RealSports Boxing* at the minute," says Ben).

As if to emphasise the lengths Ben has gone to to create the Atari 2600+, he reveals



» [Atari 2600+] An extra controller is needed for Atari 7800 games like *Jinks* that support two buttons.

» [Atari 2600+] Here's *Mario Bros* from a time when Nintendo games were widely ported to other home consoles.

» [Atari 2600+] *RealSports Boxing* won't work as yet but Atari is working on a solution.

he travelled to Sweden to visit the Embracer archive. "They have an extensive 2600 and 7800 collection – I think they had about 300 carts," Ben says. "*Pitfall II*, incredibly, wasn't one of them, but we know this game won't work because it has an additional chip in it that contains specific Activision intellectual property. *Omega Race* also contains an additional chip but we believe we can make that one work. Cartridge compatibility has always been very important."

That said, the console isn't solely geared up to play old titles. The Atari 2600 and 7800 consoles are blessed with a host of impressive homebrew titles, and new cartridges will be released for the 2600+ (the 2600 will be NTSC; 7800 games will be offered as both NTSC and PAL). "Since Atari bought AtariAge, I now have access to people who have loads of homebrew cartridges and the quality of that stuff is insane. We will obviously update the firmware to get as many homebrew carts working," says Ben. The hope is that the new games will continue to make the Atari 2600+ attractive.

So how do they look? Well, when games are up and running, they display at 720p. "We did consider a higher resolution but, to be honest with you, I thought the machine plays great and works fantastically at a nice, stable 720p and there's no stuttering and no issues at all," Ben explains. "With 1080p, you're putting more strain on the CPU, doubling or tripling the number of pixels you've got to push out on the screen. This may, in extreme circumstances, affect performance and stability is key for me."

As it stands, there is no CRT TV simulation. Nor is there an ability to save games. But one thing Ben points out is that the Atari 2600+ is not a "drop and run" product. Updates will continue to be made, "The machine has legs," he says. It means features missing today may not be missing in a few months' time and Ben is aware that there are additions the Atari community desires even if he doesn't always believe in them himself. "Personally, I don't like the idea of

» [Atari 2600+] You can play *Pitfall!* on the Atari 2600+ but you can't play the sequel because of its custom chip.

CRT emulation and save states but I know people do," he says. "In the day, you were just switching your console on and it was instantly playable. You saved nothing. So I thought that adding stuff like that was taking away from the ethos of the original machine. Of course, regardless of my personal preference, we need to provide choice, so we're looking at including these types of features in future updates. We have to give those things. And I believe we will."

2600+ ALTERNATIVES

HOW TO PLAY ATARI TODAY

HYPERKIN RETRON 77

■ Hyperkin's RetroN 77 is similar to the Atari 2600+ in some ways. It has a cart slot and plays 2600 games via Stella emulation, outputting via HDMI. There's also a reimagined joystick. But there are many incompatible carts and the earlier joysticks proved fragile.

ATARI FLASHBACK 11

■ If you don't want the hassle of sourcing carts, then a console with 110 built-in games is worth considering. Built by AtGames, it'll fit in the palm of your hand and it comes with a couple of wired joysticks. You can save game states too.

ATARI 50: THE ANNIVERSARY CELEBRATION

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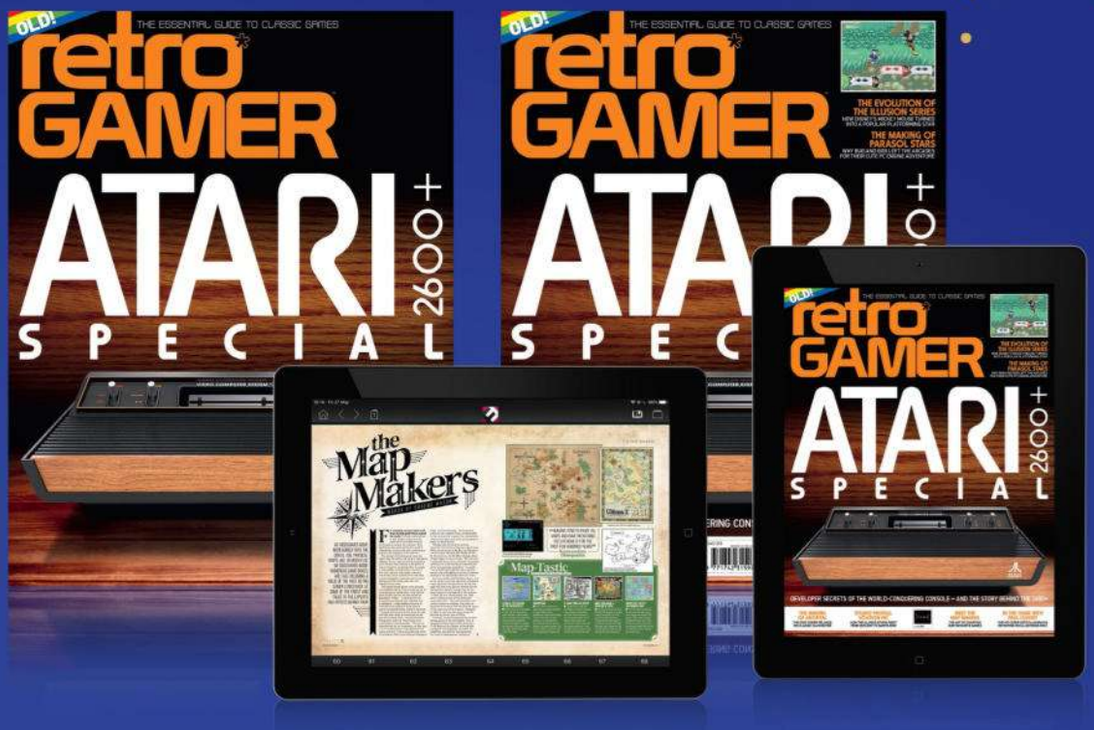

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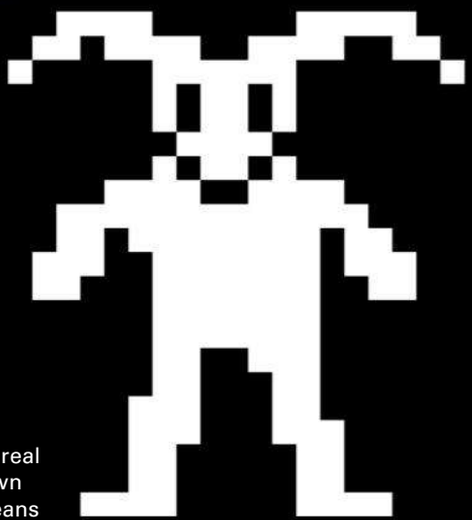
THE MAKING OF ANCIPITAL

RIGHT-MINDED COMMODORE 64 GAMERS ALREADY KNOW JEFF MINTER IS THE GOAT, SO OF COURSE YOU WILL WANT TO HEAR ABOUT THE TIME HE MADE HIS OWN 8-BIT GOAT SIMULATOR

WORDS BY PAUL DRURY



IN THE KNOW

- **PUBLISHER:** LLAMASOFT
- **DEVELOPER:** JEFF MINTER
- **RELEASED:** 1984
- **PLATFORM:** COMMODORE 64
- **GENRE:** PUZZLE-ADVENTURE-SHOOTER

Jeff Minter proudly points to a framed picture of a half-goat, half-man hybrid on the wall of his Welsh farmhouse. "That's the original artwork for the cover of *Ancipital* done by Steinar Lund. People talk about images created by AI but it's nothing compared to sitting down with an actual artist who knows what the fuck they're doing, talking about your vision for the game over a couple of spliffs and they go away and come up with something excellent like that."

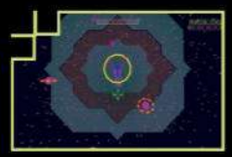
We are not talking over a couple of spliffs but we have just had a shot of baijiu, a Chinese liquor-come-paint stripper, which may explain why we wonder aloud if Jeff actually posed for the painting, given there's a certain similarity to the Minter profile. "No, but I can see the resemblance," he grins. "This big, shaggy, smelly, goatee creature."

The inspiration for the star of Llamasoft's final release of 1984 actually came from literature. Jeff was a huge fan of Brian Aldiss' *Helliconia Trilogy*, a science-fiction series set on a planet where humans and Ancipitals battle for supremacy. Jeff even made enquiries about an official tie-in with the books but soon got the impression this would be a lengthy as well as costly negotiation. "Luckily, ancipital is a real word so they didn't own it," he explains. "It means something like 'double-edged' in reference to 'horns', so I thought, 'Yeah, we can use that!'"

Jeff created a white-furred, goatoid sprite and added him to the roster of enemies in *Sheep In Space*, released earlier that year, where you'll find the Ancipital scurrying along the planet's surface in that superlative shooter. Yet by casting him as a villain, Jeff felt a lasting sense of guilt. "This is a recurring theme for me," he says. "I'd made camels the enemy in *Attack Of The Mutant Camels*, but I really like them, so I made them the heroes of *Revenge Of The Mutant Camels*. I knew I had to do the same for [the] Ancipital!"

So the goat became the star of Jeff's next project and he resolved to use it as an opportunity to explore game styles new to him. "I'd never done a platform game so I wanted to have jumping in this one," he explains. "There was also a bit of competition back then to get as many

» [C64] The solid walls in the game map are laid out in the shape of a llama. Of course they are.



DEVELOPER HIGHLIGHTS

SHEEP IN SPACE
RELEASED: 1984
PLATFORM: C64

TXK
RELEASED: 2014
PLATFORM: PS VITA

AKKA ARRH (PICTURED)
RELEASED: 2023
PLATFORM: SWITCH, PC

» Jeff Minter with Maya the llama.

» Jeff and Paul enjoying a sensible pint before the Amazonian spirit left them both speechless.

» [C64] Your bullets are different in each room and are themed to that level – here you're firing holey shoes at Neil from *The Young Ones*.

> "STUPID LITTLE THINGS THAT OCCURRED IN MY LIFE ENDED UP IN THE GAME, JUST SHIT THAT HAPPENED DOWN THE PUB"
>
> **JEFF MINTER**

levels in as possible, so I wanted to make my game have a big map... and if there's a map you have to explore, that's like an adventure, so I wanted to put in keys you had to find and puzzles you had to solve, as well as shooting stuff. It became a puzzley, adventurey, shooty thing!"

Spread across a ten-by-ten grid, *Ancipital* required you to guide your hairy hero through 100 rooms, each with exits which had to be unlocked. Usually, this meant blasting the enemies which populated each level and letting their burning corpses crash against the walls to gradually weaken them. Some, however, necessitated a different approach, from neutralising a foe and then quickly colliding with it before it evaporated to collecting Camel Keys or opening exits using no firepower at all. Learning the rules of each room was part of the challenge, ▶

» [C64] Jeff thoughtfully included hints, because turning potties into mines to destroy half cars might not be immediately obvious to the sane.

» The pull-out poster which came with the October issue of *Personal Computer Games*.

GROOVY ROOMS

FIVE ANCIPITAL LEVELS TO MAKE YOU WONDER WHAT JEFF WAS ON

ESCAPE-CND

■ Jeff may be a peace-loving hippie but he chose to make this room, featuring the logo of the Campaign For Nuclear Disarmament, especially aggressive, due to the four interior walls. Jumping and turning in such a tight space is tricky.

HENDY'S JEANS

■ Jeff's mate Hendy and his incendiary trousers inspired this denim-filled room, which also stars Jeff and his trusty zippo lighter. Hendy's wardrobe would return in Jean Status Marginal, which includes his yellowing Y-fronts.

NO SPRITES NO NOTHING

■ Jeff was pretty clear about which side he was on in the 8-bit home micros war. This level requires you to blast Commodore 64s into Sinclair Spectrums. You can almost smell the burning rubber.

▶ though Jeff thoughtfully included a hint system, activated by pausing the action, for those bemused as to why their persistent blasting just wasn't yielding results. And if you got totally stuck, you could even sacrifice a life and turn yourself into a goat-shaped bomb to blow the bloody doors off.

As well as solving these little self-contained puzzles, players had to master the jump-turn. Each wall in the game had its own gravitational pull, meaning your hooves locked to any surface they landed on. Leaping across to an opposite wall was fairly simple but twisting direction mid-flight to successfully land on an adjacent wall required, as one reviewer put it at the time, a Torvill and Dean-style pirouette. Mistime your manoeuvre and you're served up fried goat. "There was no real reason to kill you," says Jeff, shaking his head. "If I was making *Ancipital* now, I'd just let you bounce off walls, not electrocute you. I was still learning back then, experimenting to see what worked. I could get too experimental, like with *Mama Llama*, where I was maybe pushing too far and it didn't click with people, but part of the joy of that era was that you could push in all these different directions."

Jeff also clearly enjoyed dreaming up the vast array of weird and wonderful enemies which populated *Ancipital*'s many rooms. There were many familiar, furry faces from his previous work – camels, sheep and llamas all feature – but they are joined by some real oddities. You must battle half-eaten apples, CND signs and Q*bert's sweary speech bubbles on your long journey through the maze, as well as toxic underpants and well-worn denim in the cryptically titled level, Hendy's Jeans. Erm, care to explain, Jeff?

"Ah, that came about purely because of a night down the pub with my mates," he smiles. "One of my mates was Hendy, the mad Mathemagician, and for a laugh, we started trying to set light to his jeans with my zippo lighter. As you do. Stupid little things that occurred in my life ended up in the game, just shit that happened down the pub."

Given *Ancipital* also features mushrooms, Rizlas and joints, we are impressed he recalled so much to code into the game. What is also noticeable is the number of recognisable brands he included, from the Atari logo to Coke cans. Was he ever worried about copyright issues, we wonder? "I think people are far too fucking precious about that kind of stuff," he snaps back. "It was just stuff around us, the zeitgeist… I wasn't trying to profit from it. Someone told me if I reissued one of my games which had a red and white can in, I'd have to change it. Are the Coca-Cola Company really going to give an eighth of a fart about some 40-year-old game that's got a sprite that looks vaguely like a Coke can in it, for fuck's sake?"

It's clear Jeff didn't worry too much about what he put into his game, which stretched as far as multiple representations of himself.

» [C64] Time to bogart that joint…

» [C64] If you weren't playing an original copy of *Ancipital*, this screen was looking at you…

RORY ON THE BOOZE

■ Rory was based on a real guinea pig, though Jeff added the savagery – shoot the little rodent and he'll go straight for your throat. You'll encounter him on several levels – this one requires you to immobilise him with well-aimed wine glasses.

SHEEP IN SPACE

■ It's appropriate that one room should be based on the game in which Cippy made his debut and Jeff made it a tough one. Four shadowy Ancipitals patrol each wall, meaning you have to constantly hot hoof your way round the screen to avoid them.

» [C64] Jeff himself appears in several rooms – with his beloved camels here.

» [C64] You'll often come across nods to arcade games of the day in *Ancipital* – no prizes for recognising this big-nosed potty-mouth.

You encountered Manic Minter, Yak The Hairy and even a Jeff lookalike, Neil from *The Young Ones*, the archetypal Eighties hippie, complete with a shoe with a hole, as per his one-hit wonder. Does Jeff have a favourite from the bizarre *Ancipital* menagerie? "It would have to be Rory The Savage Guinea Pig," he replies. "I got a very nice letter from a girl who lived up near Newcastle who called herself the two-toed sloth. She asked if I could put her pig in a game. I said yeah but he couldn't just run round eating hay and squeaking, so I made him passive unless you shoot him. Then he goes savage. And you will die."

"I WAS STILL LEARNING BACK THEN, EXPERIMENTING TO SEE WHAT WORKED. PART OF THE JOY OF THAT ERA WAS THAT YOU COULD PUSH IN ALL THESE DIFFERENT DIRECTIONS"
JEFF MINTER

The passive-aggressive Rory is just one example of Jeff trying to make each screen a little different and that even went as far as the backbeat which soundtracked the action. Dubbed The Phil Collins module, he created procedurally generated drum loops, so every room has a slightly different rhythm to it, both aurally and blasting-wise. It's one of many little touches that helped *Ancipital* score highly in the magazines of the day, with *Computer And Video Games* awarding it 9/10 and *Personal Computer Games* making it its Game Of The Month in October 1984 – the pull-out poster which came in that issue adorned the wall of your correspondent's teenage bedroom for many years. Jeff remembers the game doing pretty well in terms of sales and there was talk of it being converted to the Spectrum and the Amstrad by a Z80 coding friend, but this came to nothing.

Ancipital's main character did return briefly in 1985, as the lead in *Cippy On The Run*, one of *Batalyx*'s minigames, which had the goatoid defying gravity once more to paint both ceiling and floor in psychedelic colours. Yet despite Jeff's obvious affection for his creation, he has never revisited *Ancipital* and it remains a C64 exclusive. We are about to ask if he has ever considered resurrecting old Cippy when Jeff's life and Llamasoft coding partner Ivan Zorzin, better known as Giles the billy goat, aptly enough, brings out a bottle of jambú, an infamous, mouth-numbing, Amazonian spirit. Its anaesthetic properties kick in quickly and so we have to leave the last question to Giles.

"Do you think you could ever be tempted to do one more Commodore 64 game?" he asks. "Maybe," muses Jeff. "I mean, I did go back to *Revenge Of The Mutant Camels* recently to fix a bug that had been bothering me for years. I know there's a market for C64 games but I'm not sure if it's enough to justify me sitting down for six months to make one. It would be interesting, though, and Cippy was one of the characters I liked the most. I really enjoyed that period of my life. It was such a free and fluid time to be making games." And to be playing them, too, Jeff. ✱

Thanks to Jeff and Giles for their hospitality and Martyn Carroll for additional help.

GOAT STIMULATOR

HOW ANCIPITAL HELPED START TWO CAREERS IN THE GAMES BUSINESS

■ "*Ancipital* was a tipping point for me," enthuses veteran games journalist Gary Penn, whose writing has graced the pages of *Zzap!64*, *The One* and, erm, *Knave*. "It was a catalyst for my whole career, even. I completed it and sent in my 100% score to Llamasoft. I got a complimentary slip back signed by Jeff's mum, Hazel, confirming I was the first they'd heard of to finish the game. I sent it to *Personal Computer Games* along with a play guide, which got published and led to me being invited to their Britain's Best Gamer competition, which is where I met Chris Anderson, Bob Wade and Jaz. When *PCG* folded, sadly before the competition made print, Chris approached me, Jaz and the winner to interview for a job on a new magazine, which, of course, turned out to be *Zzap!*" Ancipital was also responsible for introducing Marion 'Mo' Warden to Jeff. She won the competition in the Llamasoft newsletter, *The Nature Of The Beast*, for coming up with the best excuse for a bug in the game, which let Cippy walk through solid walls. Her suggestion that the randy goat had spied a scantily clad female Ancipital just off the screen not only tickled Jeff, it led to Mo producing the loading screen for *Batalyx* and background graphics for light synth *Colourspace*. You can read all about Mo's career in **RG**166.

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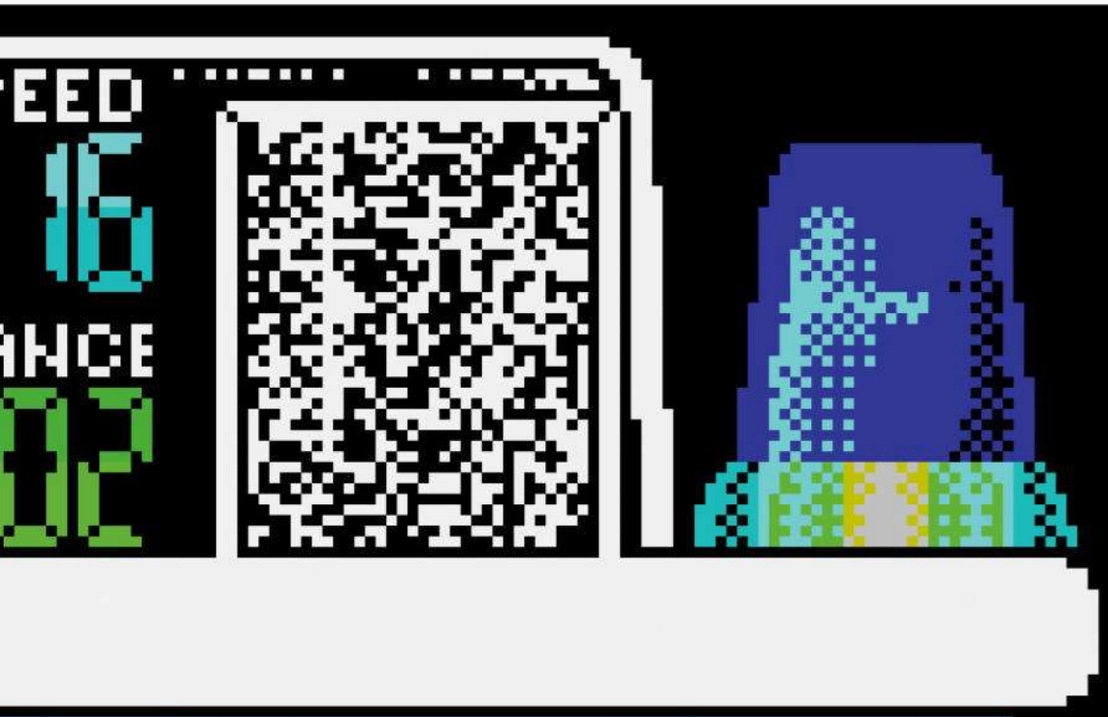


Chase HQ

THE POWER OF A V8-BIT ENGINE

» ZX SPECTRUM » 1989 » OCEAN SOFTWARE

Working on this magazine can do funny things to you, and *Chase HQ* is a great example of one of them. I know that the arcade game is the original version, and therefore the definitive release. Most of my time playing the game was on the Master System conversion, a pretty solid rendition that may well be the first combat racer I ever actually played. On a nostalgic level, it's the obvious choice for me. Yet when I think of *Chase HQ* these days, I don't think of either the original version or the version that I played the most – I think of the ZX Spectrum version.

Those of you who are in the know won't need telling, but for the benefit of those that have never had the pleasure of seeing Ocean's Sinclair rendition of Taito's arcade hit, it's a seriously impressive piece of work. In an era when this type of racing game was a struggle to bring home faithfully, *Chase HQ* feels great thanks to its relatively smooth framerate and convincing sense of speed. The little radio messages as you track down the criminals are a welcome touch, and perhaps most impressive of all, proper sampled sounds including speech are available on the 128K systems.

I didn't play the Spectrum version of *Chase HQ* for the first time until I'd already started on **Retro Gamer**. I had a PS4 at home, and I guess most people in my position wouldn't have looked at *Chase HQ* as anything special next to something like *Driveclub*. I actually got the same feeling from both games though, because within the context of the hardware they were running on, they both stood out as remarkable technical achievements. That's ultimately why the 8-bit rendition of *Chase HQ* is the one that occupies so much of my mental space – none of the other versions had the same 'wow' factor for me.

the Map Makers

WORDS BY GRAEME MASON

AS VIDEOGAMES MOVE INCREASINGLY INTO THE DIGITAL AGE, PHYSICAL MAPS, LIKE SO MUCH ELSE WE DISCOVERED INSIDE WONDROUS GAME BOXES, ARE FAST BECOMING A RELIC OF THE PAST. RETRO GAMER LOOKS BACK AT SOME OF THE FINEST AND TALKS TO THE EXPERTS AND ARTISTS BEHIND THEM

For centuries, humans have used maps to help guide them around the world. A simple, scaled picture of your location and its environs, maps are an invaluable resource as we seek to conquer the unknown. Their significance has continued into the world of videogames, virtual worlds that usually require just as much navigation as the real one.

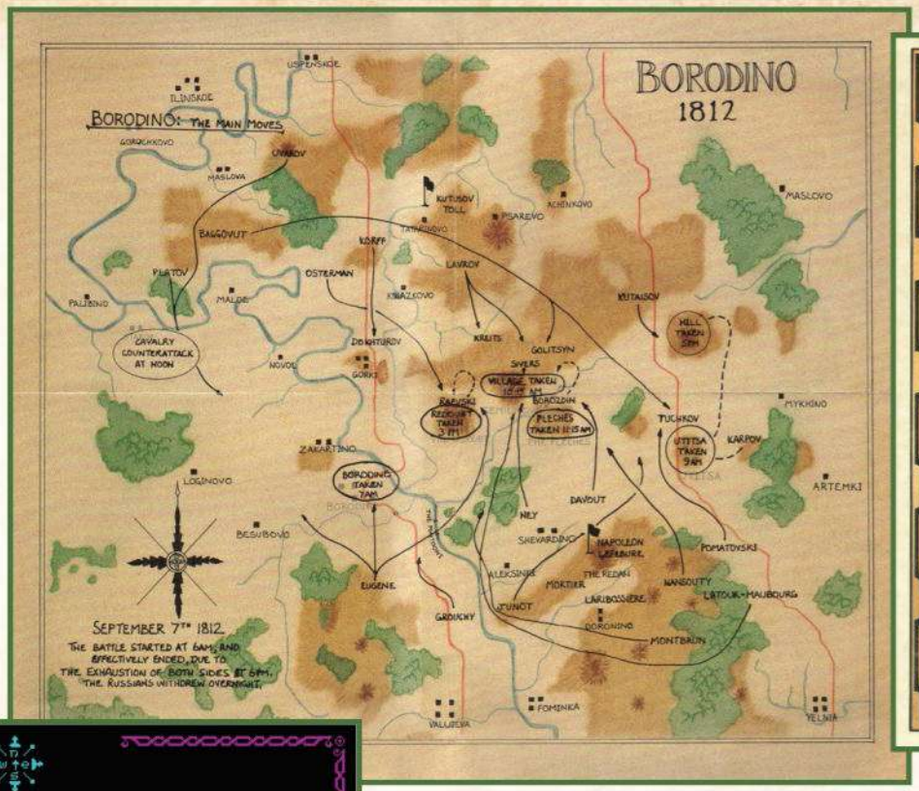
The concept of physical game maps also began with the need to add value to videogame releases. Do you need something cheapish to put in the box that's relevant to the game? A map of the game, annotated either accurately or inaccurately, would provide a moment of thrill upon opening. Even better, make the map artistic, and it could become collectable, or even displayable, a bespoke wall-mounted talking point that would surely form the highlight of any home.

The earliest arcade games were generally too straightforward to require maps, but as the computer-game market grew in the Eighties, more complex games required assistance. Branded as 'feelies' – a catch-all term for any extraneous physical item included with a videogame – maps suddenly became an important facet, helping to guide players around convoluted fantasy worlds in particular. "I'd argue that humans tend to enjoy all maps and have been doing so extensively for the past few hundred years," says Konstantinos Dimopoulos, author of *Virtual Cities* and a physical game map aficionado. "They are an important tool for our imagination, as they spur it on to visualise places to go along with the names and lines." Fellow journalist and author of the feature, *Why I Love Physical Videogame Maps*, Joe Donnelly adds, "Physical game maps are real, tangible things, and being able to visit somewhere in-game, then cross-check where you've been and where you're going on paper is a great feeling."

Tellingly, both Konstantinos and Joe remember the first time they saw a game map. While Joe glowingly recalls the map that came with the Super Nintendo RPG *Breath Of Fire*, for Konstantinos, the Sid Meier strategy classic *Pirates!* began his love of maps. "Not only was it a beautiful thing and a completely unexpected enhancer, but it also formed an important part of the core gameplay experience," he recalls. "You actually had to use the map to sail the game's seas while taking longitude and latitude readings to divulge exactly where you were."

Five years before the Sid Meier classic, one of the earliest and most significant videogame maps appeared. Disappointed in the zip lock bags that held many games, Richard Garriott stressed the need for a proper box for his second game in the legendary *Ultima* series. "I didn't get into *Ultima* proper until 1998 when I picked up the *Ultima Collection*," remembers Joe. "They were beautiful, and while a novelty to a degree, they were so detailed and authentic that they felt like copies of the maps you'd find in-game." Released in 1982, it was here that maps started to become an intrinsic part of RPGs.

In the UK, the trend continued into the 8-bit fantasy games of the mid-Eighties. Fans of Gargoyle's brilliant Celtic arcade adventures, *Tir Na Nog* and *Dun Darach*, will recall their protagonist stomping down city paths, his delightfully animated hair flowing behind him. Each of these game's instructions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BORODINO: THE MAIN MOVES
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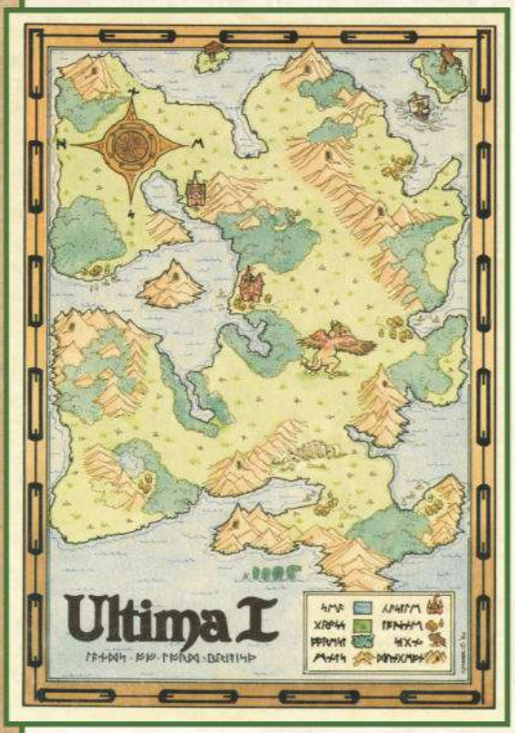
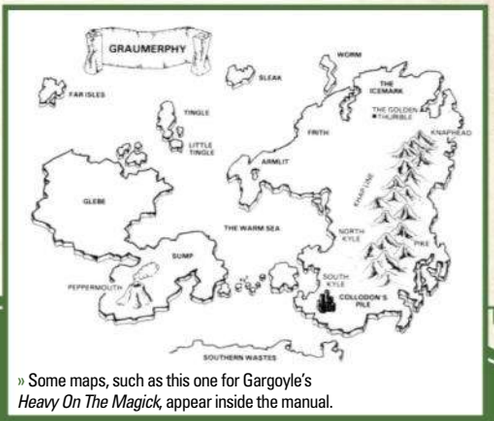
THE BATTLE STARTED AT 6AM, AND EFFECTIVELY ENDED DUE TO THE EXHAUSTION OF BOTH SIDES AT 6PM. THE RUSSIANS WITHDREW OVERNIGHT.



» Before the cloth: *Ultima I*'s original paper map.

» Gargoyle's Brendan McMahon is perhaps the only artist to end up in the game itself.

> "HUMANS TEND TO ENJOY ALL MAPS AND HAVE BEEN DOING SO EXTENSIVELY FOR THE PAST FEW HUNDRED YEARS"
>
> **Konstantinos Dimopoulos**



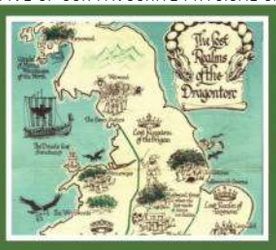
» Some maps, such as this one for Gargoyle's *Heavy On The Magick*, appear inside the manual.

Map-Tastic

FIVE OF OUR FAVOURITE PHYSICAL GAME MAPS

ULTIMA II: THE REVENGE OF THE ENCHANTRESS

■ While it is not the most detailed of maps, *Ultima II* recreates an oddly misshapen Earth (Scotland looks a bit lumpen), the intervening seas and oceans patrolled by monsters and sailboats. It marked the beginning of the series' famous cloth maps, which remain highly sought after today.



DRAGONTORC

■ Steve Turner's follow-up to *Avalon* was as equally embedded in English folklore as its predecessor. Dotted with mystical woods, stone circles, castles and more, it's more beautiful than practical, not least with its delicate and spindly typeface. The reverse contains a poem by Steve Turner explaining the game's plot.

IT CAME FROM THE DESERT

■ Created by the sadly late Jeff Hilbers, this fine line-drawn map perfectly encapsulates the Fifties B-movie charm of the Cinemaware game. Lizard Breath's key locations are marked with angular verve and fascinating perspective – look carefully, and you'll spot an area named after the artist himself.

MIGHT AND MAGIC V: DARKSIDE OF XEEN

■ This fantastic map from artist Michael Winterbauer, set against a starry background, is full of evocative detail and drama. Through the Perishing Sands to the Quivering Forest and Castle Blackfang, each segment of this colourful guide is rendered with startling skill and imagination.

GRAND THEFT AUTO'S SAN ANDREAS MAP

■ The *GTA* series has become synonymous with paper maps, and it began with the very first game in 1997. Inside the large cardboard PC box came a map of each of the three cities and, interestingly, helpful info such as the locations of police stations and spray shops.

the Map Collector

RETRO GAMER CHATS TO MAP COLLECTOR BILL ANASTASIA

WHEN AND WHY DID YOU DECIDE TO START COLLECTING VIDEOGAME MAPS?
With my first C64 games back in the Eighties, we were fortunate enough to get instruction manuals and adventure guides and usually a map of some kind. Nothing was more fun than obsessing over a game map and pushing yourself to reach those locations in-game.

WHAT DO YOU THINK MADE MAPS SO IMPORTANT BACK IN THOSE DAYS?
In the days of 8-bit graphics, we often had to use our imaginations to visualise these worlds. A map served as a window into a far-off realm that we were anxious to explore. In lieu of high-end graphics, a well-detailed map, with cities, towns, dungeons and shrines would be the catalyst for spurring our imaginations and help transplant us to these strange landscapes.

DO YOU HAVE A FAVOURITE MAP?
My personal favourite map is of *Dungeon Siege*. It's a simple yet detailed, well-coloured map that perfectly matches the in-game world. Honourable mention to the map for *The Witcher 3*.

DO YOU THINK IT'S SAD THAT GAME MAPS ARE BECOMING RARER WITH THE ADVENT OF THE DIGITAL AGE?
It's not only sad but unfortunate. There is a certain feeling of excitement that comes from opening a new game and finding a map, along with other goodies; you weren't just buying a game, you were buying all the accessories that came with the game. Some publishers still release collector's editions, and I'm grateful for that. Additionally, the online community has embraced the idea of putting interactive maps online and older big box PC games are seeing a revival with collectors. I think some of us just miss the days of physical media.

WHAT'S THE PRIDE OF YOUR COLLECTION AND THAT ONE MAP YOU'RE STILL AFTER?
My pride is *Ultima I: The First Age Of Darkness*. Cloth maps are always highly desirable – a nice, thick, detailed and coloured cloth map is still the best. *Ultima II: Revenge Of The Enchantress* remains an elusive one for me. I'm sure I'm not the only one with a game map obsession, so hopefully, this article will inspire some readers to dust off their game boxes and find those maps! I'd love to see what other people have in their collections.

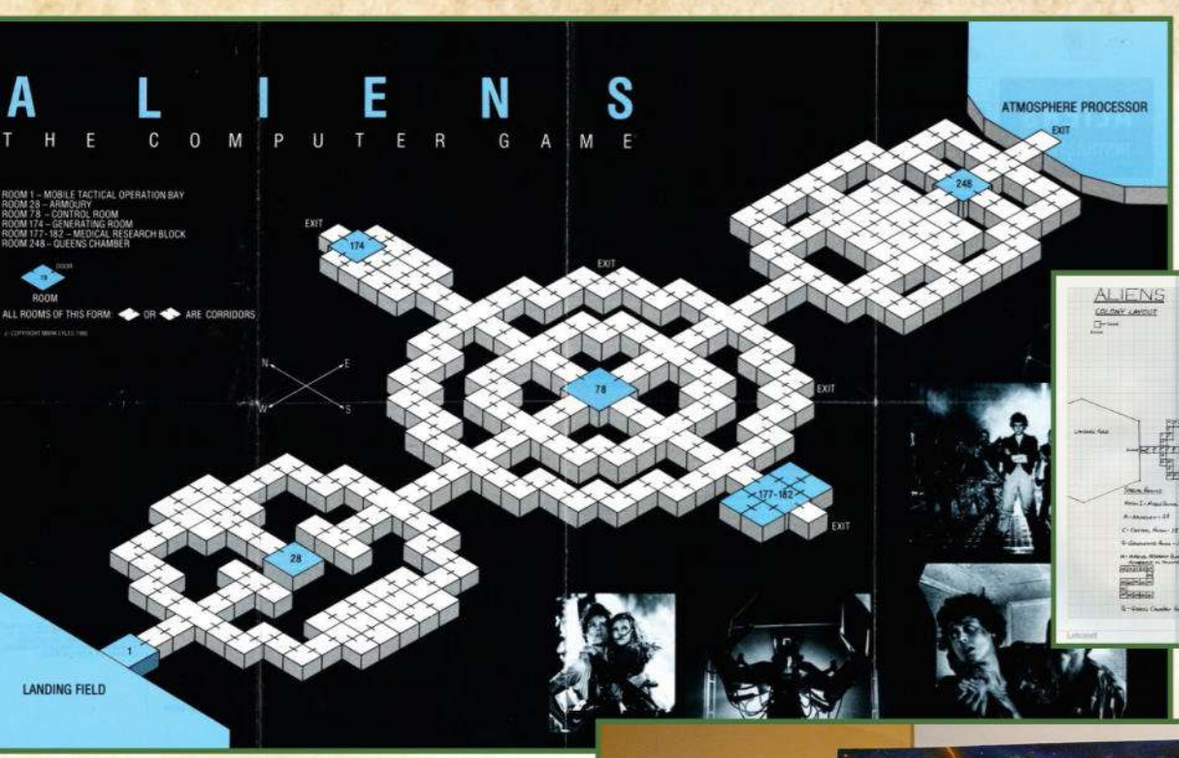
Our thanks to Bill for his time.

> "ALIENS HAD A BIG GAME WORLD, AND I KNEW THAT KEEPING TRACK OF WHERE YOU WERE WOULD BE IMPORTANT"
> Mark Eyles

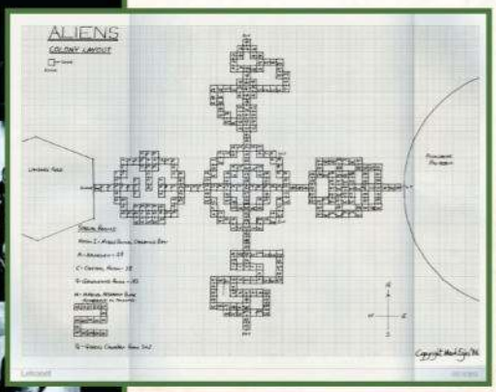
▶ incorporated a map drawn by freelance artist Brendan McMahon. "It was [Gargoyle cofounder] Greg Follis' idea to incorporate maps into these games," says Brendan. "Mainly the games' storylines were of ancient Ireland, tales of warriors, wars, mysteries and folklore. I wanted the visual illustrations and typography to echo those times." Drawing with pen and ink on a CS10 board, a standard style of paper board used by many artists of the time, Brendan lovingly inked the city of Dun Darach, the sweeping wind-swept spires leading to an ominous-looking castle at the top of the map. "I think the maps added another dimension to the games," he adds. "Genius for the times, and Greg had the idea of making me mapmaker – so I became Bren The Mapmaker in the game itself!"

Away from their prevalence in RPGs, maps began to appear in other genres, and when it came to games such as Electric Dreams' *Aliens*, there was a real practical need to help the player negotiate a labyrinthine maze. "*Aliens* had a big game world, and I knew that keeping track of where you were would be important," says Mark Eyles, designer of the futuristic map that accompanied the movie adaptation. Mark created this map's original template, connecting the various rooms of the first-person horror game. "I drew it by hand on squared paper, and you can see my isometric sketch in the corner. I was already thinking of the world as a 3D environment." *Aliens*' map is an invaluable addition, helping players locate important locations throughout the base on LV-426. A graphic designer was brought in to hone Mark's work, emphasising the isometric view while adding images from the film to create a visually interesting picture. The idea was also taking hold with producers, adding extra value to premium games such as *Aliens*. Recalls Mark, "Rod Cousens [the boss of Electric Dreams] thought it was a great idea to include a map – as long as it wasn't too expensive!"

Along similar practical lines are the maps included with flight simulations. By the late-Eighties, Digital Integration had established itself as the UK's premier exponent of the genre. Despite having no videogame experience, graphic designer Kerry Le Gray joined DI in time to work on one of its biggest releases, *Tornado*. "I would have been



» Mark Eyles' *Aliens* map, adapted into an isometric form for the UK edition of the game.



» Mark Eyles' original 2D map for *Aliens*, drawn on graph paper.

given the colour map image that one of the programmers had created," says Kerry. "I then recreated the layout, key, logo and more and put it all together." This was map-making in the modern age: Kerry used a PC running a now-obsolete program called Pagemaker alongside Adobe Illustrator and Photoshop. Digital Integration soon realised the value in Kerry's creations and her ability to work in all areas of game production, including packaging, boxes, adverts and manuals. Games such as *Tornado* included copious maps in their boxes, each accurately representing the hazards and topography the player encountered in-game. "I think I made a big difference as their first internal graphic designer, and I felt highly valued," adds Kerry.

Yet the association between physical maps and the RPG was never far away. As the Eighties progressed, each *Ultima* game saw the debut of another cloth map, mysterious runes pitted across each painting. Culminating in *Ultima VI*'s gorgeous effort, these maps provided multiple roles: useful in helping the player negotiate the dangerous lands, collectable and a great addition to any wall. "I became totally obsessed with *Ultima*'s cloth maps," remembers Joe Donnelly. "They're surely the best example of physical game maps done right." This combination of fantasy and a place that doesn't exist is made real thanks to a map, and the RPG genre harks back to a time before computer games. "Fantasy RPGs have a long association with maps, and I think it's a combination of both JRR Tolkien's legacy – the good professor was very big on maps – and the pen-and-paper roots of all CRPGs," says Konstantinos. "To this day, maps are the most important gaming props on the tabletop."

» Artist Michael Winterbauer sits proudly alongside his 2014 repaint of his *Darkside Of Xeen* map.

Square's first instalment in its *Final Fantasy* series emphasises this point: the map of its world is surrounded by a picture of each location and spaces for the player to add their own notes if they so wished.

In 1985, artist Michael Winterbauer graduated from the Art Center College Of Design in Pasadena, California, finding work painting VHS movie covers, including 1988's *The Brain* and *The Cars That Ate Paris*. After breaking into the games industry with his cover for World War I flight sim *War Eagles*, Michael contributed to the manual and maps for the latest in New World's famous RPG, *Might*

» RPGs have long been associated with physical maps.

» This black and white map accompanied the fantasy wargame *Sorcerer Lord*.

» *The Fairy Tale Adventure* for PC included disks, a map, instructions and a clue sheet.

And Magic: Clouds Of Xeen and its direct sequel, *Darkside Of Xeen*. "I was given a large, colour-coded grid printed out on paper as my main reference," he tells us. "The first step was to use the grid to draw a detailed map showing where the different areas of the world should be. Once the general areas were drawn, I added all the natural elements from the game world, including trees, waterfalls, mountains, rivers and caves." Using a step-by-step process, Michael ensured his maps matched what was in the games. "It was all hand drawn and very time-consuming. I drew creatures and castles on separate paper to fully develop them with details." Michael then used a Xerox machine to scale his drawings so they fit into the larger drawing of the world. It was a painstaking process, albeit one the artist enjoyed immensely, "It was like assembling a huge puzzle with these pieces that I had made."

Michael's maps of *Xeen* are true works of art, each taking approximately six weeks to complete and featuring particularly vibrant colours. "Colour was very important to separate the individual sections of the map," he explains. "The maps had to be interesting, but also easy to read, enabling players to see things quickly and clearly." From pencils to draw and design the maps, Michael used acrylic paint, adding final details and fine line work with Prisma colour pencils and an Iwata airbrush. "I always enjoyed the process of creating a physical painting – it was exciting and fulfilling to see these maps come to life in my studio."

> "I ESPECIALLY LOVE SKYRIM'S MAP, WHICH I'VE HAD PINNED TO THE WALL NEXT TO MY WORK DESK SINCE ITS RELEASE!"
> **Joe Donnelly**

Throughout the Nineties, maps persisted, notably in mammoth RPGs such as *Baldur's Gate* and *Icewind Dale*. Action games such as the 1997 release *Grand Theft Auto* also used them to demonstrate the breadth of their worlds and to help players navigate around them. But slowly, maps were being edged out – slim DVD-style boxes became standard, their narrow spaces barely containing enough room for a manual, let alone a folded map. In-game maps were also now common, the player able to flick to an on-screen guide at the press of a button rather than use the more authentic but less immersive process of consulting a physical map.

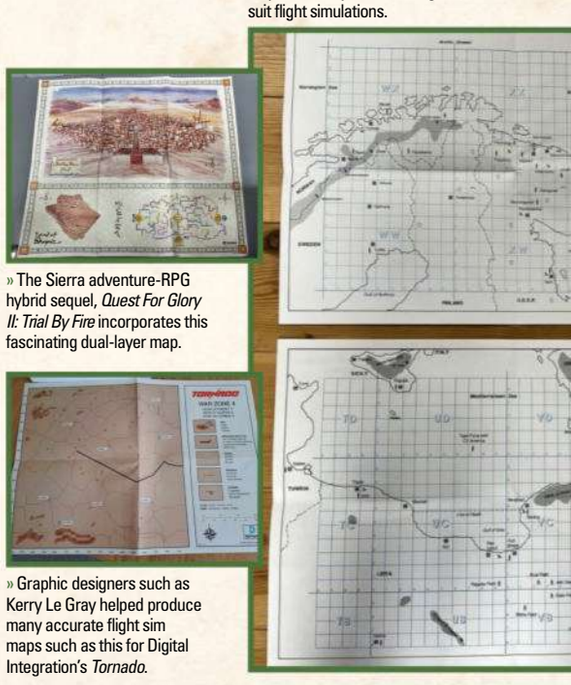
Nevertheless, Rockstar continued to fly the flag into the 21st century with its detailed maps for *Bully* and *Red Dead Redemption*, as did Bethesda's *The Elder Scrolls* series. "I especially love *Skyrim*'s map," reveals Joe, "which I've had pinned to the wall next to my work desk since its release!" The connection between RPG and map, one of adventure and discovery, remained strong, even in 2011. "If we think of physical games as starter packs of sorts for

What's In The Box?

WHAT OTHER TYPES OF GOODIES DID WE USE TO LOVE?

Of course, it wasn't just paper and cloth maps that gamers often discovered inside their newly acquired boxes of joy. Throughout the Eighties, it was common to find extras, usually for those high-priced games that needed something more to persuade you to part with your cash. From peculiar items such as *Friday The 13th*'s blood capsules to the more regular music tapes and posters (as popularised by Ocean Software inside *Frankie Goes To Hollywood* and *RoboCop,* respectively), those big boxes often promised a lot more than the mere disk and instruction manual. Books such as *The Hobbit* accompanied licences based on literature, while games like *Exile* and *Starglider* included bespoke novellas, written exclusively to expand the game's backstory. As the big box phenomenon grew during the Nineties, a whole range of paraphernalia accompanied most games: registration cards, adverts, special offers, badges, T-Shirts, keyboard overlays and copy protection schemes or dongles. Somewhere among that lot were the most important bits: the manual and game disk.

» Real-world maps, such as these maps from *Project Stealth Fighter*, suit flight simulations.

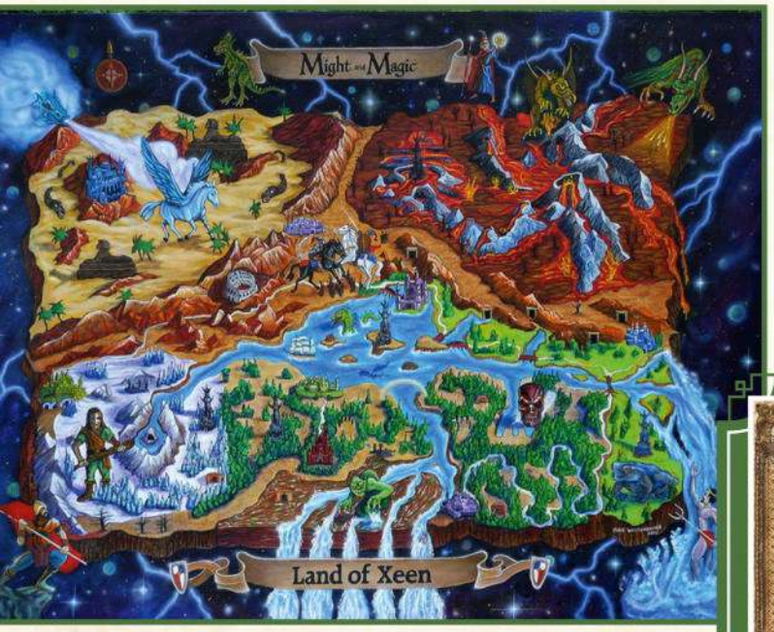


» The Sierra adventure-RPG hybrid sequel, *Quest For Glory II: Trial By Fire* incorporates this fascinating dual-layer map.

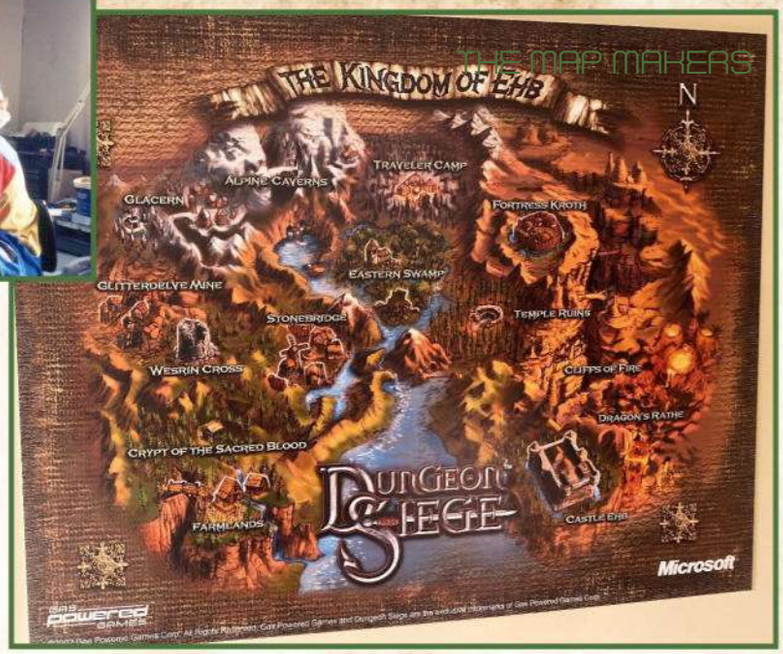
» Graphic designers such as Kerry Le Gray helped produce many accurate flight sim maps such as this for Digital Integration's *Tornado*.

» The first *Final Fantasy* game arrived with this useful map, including space for making notes.

» Artist Michael Winterbauer, hard at work with a friend.



» A land of colour: Michael Winterbauer's original *Land Of Xeen* map.



» The fantastically moody map of Ehb from *Dungeon Siege*.

the adventure that lies ahead, the instruction booklet and map are, in essence, the tools to help get the job done," Joe says.

Sadly, today, there's a more nefarious threat to physical maps than smaller boxes: no box at all. "The switch to digital hinders the likelihood of physical game maps," laments Joe. Yet while the sting will be most felt with beloved series such as *The Elder Scrolls* and *Grand Theft Auto*, the latest versions of which are unlikely to include a map, there is hope that these aesthetically pleasing pictures will continue in one form or another. "It's over for mainstream products, yes," declares Konstantinos. "The lack of physical elements is always taken into account when it comes to designing videogames. But there are still maps nowadays, either made as decorations for special editions or substituted by digital in-game counterparts." The dawn of the interactive map, a digitised online version of a game with clickable annotations, is upon us, a valuable tool that inevitably lacks the tactile nature of physical maps.

Like so many elements of gaming, maps are destined to fold into the past, kept alive by a few stalwarts, celebrating these amazing pieces of artwork, embellished with the theme of the game, and evoking that same sense of adventure and wonder that compels us to play videogames in the first place. ✱

Keeping The Flame Alive

RETRO GAMER TALKS MAPPING WITH FRANCESCA BAERALD

■ Ever since she was little, growing up in her native Italy, artist Francesca Baerald has loved maps. "I've always been fascinated by the maps I found in games – then discovered a passion for drawing them much later," she tells us. Living in Italy, a country laden with exquisite historical art, Francesca draws on this and her acute observational skills. While Francesca's most famous works are for 2018's *Octopath Traveler* ("One of the biggest maps I've done – it is almost bigger than a dinner table for eight people!"), and a map of *Dragon Age*'s Thedas, her favourite is from a series that holds special significance for her. "*Diablo* was one of the first games I ever played, so my map of Sanctuary for the *Diablo IV Collector's Edition* has a very special place in my heart," she smiles. To view Francesca's glorious videogame maps and more, head to francescabaerald.com

THE MAKING OF PARASOL STARS

THE STORY OF BUBBLE BOBBLE III

PARASOL STARS IS A CULT ENTRY IN TAITO'S BUBBLE BOBBLE SERIES AND IS DUE TO BE RE-RELEASED FOR MODERN SYSTEMS. DESIGNERS KATARU UCHIMURA AND HARUO SUZUKI AS WELL AS SOUND DIRECTOR YASUKO YAMADA REMEMBER THE CREATION OF TAITO'S CHARMING PC ENGINE GAME

WORDS BY FAITH JOHNSON

IN THE KNOW

- **PUBLISHER:** TAITO
- **DEVELOPER:** TAITO
- **RELEASED:** 1991
- **PLATFORM:** PC ENGINE, VARIOUS
- **GENRE:** PLATFORMER

***Parasol Stars* was the first original title in the *Bubble Bobble* series not to be developed for arcades.** Initially designed by Taito on PC Engine, it was then ported to various computers and consoles by Ocean for the European markets. It may be less known than its predecessors *Bubble Bobble* and *Rainbow Islands* but it builds on everything these two classics laid down. *Parasol Star*'s story continues directly after *Rainbow Islands*. Bub and Bob, still in their human form, have been presented with magical parasols as thanks for rescuing Rainbow Island's inhabitants. However, a new evil has started invading nearby planets and the duo must utilise their new parasol powers to save the day.

Parasol Stars' project planner, Kataru Uchimura, joined Taito in 1988 and he played a key role in its development, most notably through designing levels, balancing the game, creating core game design and deciding on the game's specifications. Uchimura starts by telling us how the idea for the game came about. "Although I was the game designer for *Parasol Stars*, I was also a fan of the games. I was 18 years old and still in high school when *Bubble Bobble* and *Rainbow Islands* came out. I've great memories of playing with my friends on *Bubble Bobble* and competing with them on *Rainbow Islands* after school."

In 1989 *Bubble Bobble* creator Fukio Mitsuji left Taito and Uchimura was left worried. "What's going to happen to the story of *Bubble Bobble 2*? I liked the game system and world of *Bubble Bobble* and *Rainbow Islands* so much I was selfishly

DEVELOPER HIGHLIGHTS

SPACE INVADERS
RELEASED: 1978
PLATFORM: ARCADE, VARIOUS

BUBBLE BOBBLE
RELEASED: 1985
PLATFORM: ARCADE, VARIOUS

THE NEWZEALAND STORY (PICTURED)
RELEASED: 1988
PLATFORM: ARCADE, VARIOUS

hoping a sequel would be released one day. After that, there was no talk of a sequel, so I decided that I had no choice but to make one myself and submitted a rough draft of *Parasol Stars* as a sequel to the *Bubble Bobble* series, proceeded with the planning and eventually secured an official development project for consoles."

> "I WAS 18 YEARS OLD AND STILL IN HIGH SCHOOL WHEN BUBBLE BOBBLE AND RAINBOW ISLANDS CAME OUT"
> KATARU UCHIMURA

Discussing how he decided on the parasol idea, Uchimura explains that it started with *Bubble Bobble*. "In that game, parasols are a magic item which allows the player to skip stages, so I took that as a keyword and developed the concept of the game from there. And given this sequel would feature Bubby and Bobby, I wanted to give them something to hold to differentiate it from *Rainbow Islands*."

Considering *Parasol Stars* wasn't being designed for arcades, Uchimura had to decide on which console to develop it on. "At that time, the hardware options were the PC Engine, Mega Drive and SNES, but the game design required processing power to handle bidirectional collision detection, and I wanted the game to be very colourful. For these reasons, it was decided to develop the game on the PC Engine, which only has a single background layer, but allows for 16 different colour palettes for both sprites."

Parasol Stars has a deep power-up mechanic which involves collecting droplets that build into projectiles and other useful pick-ups. "The base idea came from the bubbles in *Bubble Bobble* and rainbows in *Rainbow Islands*," Uchimura tells us. "Both are cute, water-based motifs and droplets were a natural extension of this. What they have in common is that they are objects that appear on the screen in large numbers and interact with each other. They're also influenced by the player, so their movements change each time, and this is one way of preventing the game from getting stuck in a rut."

Continuing his thoughts on developing the game's key mechanics Uchimura explains that, "The tool that controls the droplets is the parasol. I originally thought an umbrella would be more appropriate, but I liked the ring of 'parasol' more and decided to go with that. There are four types of droplets, Water, Lightning, Fire and Star and they're also the keys to getting the secret crests of each element."

When thinking about the overall influences *Bubble Bobble* and *Rainbow Islands* had on *Parasol Stars*, Uchimura says, "I wanted to design a game with a high-action puzzle element, and an emphasis on two players playing at the same time. The more I looked into the gameplay of *Bubble Bobble*, the more

» [PC Engine] The Underworld is the true final level of the game and features some familiar foes.

» [PC Engine] You might know *Parasol Star*'s first secret world as Rainbow Star World, Bubble Bobble World or Rainbow Star.

CONVERSION CAPERS

WHICH VERSIONS ARE BROLLY GOOD?

PC ENGINE

■ This is the original version, so it's obviously the best one. It has responsive controls and the best hit detection compared to the other versions, and also features the best sound. As you'd expect, all the levels, items, secrets and enemies are featured.

ATARI ST

■ The Atari ST does a good job of keeping the speed of the original as well as having all the levels. The controls feel a little stiff though and it's awkward trying to jump diagonally. Although the colours are less vibrant the music sounds excellent.

AMIGA

■ The Amiga has the port that most closely resembles the original with great controls and hit detection as well as the original music. The Amiga also has vibrant, colourful artwork and all the levels, items and enemies have made it over.

GAME BOY

■ The Game Boy port has some major changes from the original game. The most noticeable difference is the stages are much smaller, there are fewer enemies and it has less variety of pick-ups. It plays well though and the parasol mechanics remain unchanged.

NES

■ Similar to the Game Boy port, the NES version has much less impressive visuals and fewer stages to complete. The controls are fine but not as tight as the PC Engine and some of the hit detection on certain enemies is frustratingly inconsistent.

BOSS RUSH

HOW TO STOP THESE FOES RAINING ON YOUR PARADE

ONE-MAN BAND

■ *Parasol Stars*' first boss takes the shape of a one-man band made up of the instruments that are found in the first world.

HOW TO BEAT THEM: This is as simple as it gets for bosses. It simply floats around slowly and can be shot at constantly.

SUPER VIO-KUN

■ This mother bird flies about slowly and throws her chicks at you, which spray out like a fan. She also follows the player and can turn quickly, so be careful.

HOW TO BEAT THEM: Use the parasol to deflect the chicks. Set platforms alight with a full charge and guide the pesky buzzard to her death.

SUPER ERAMO

■ Loch Ness is missing a monster and this angry Nessie slowly follows players around while spurting rocks from its back.

HOW TO BEAT THEM: Use the parasol to shield from the rocks and build a charge. Keep moving and unleash a lightning attack once the rocks briefly stop.

CASINO QUEEN

■ Gamble Star's boss heads right for you, chucking deadly notes upwards. She only causes death if players are hit with a note or her centre, so keep that in mind.

HOW TO BEAT THEM: Keep moving but leave room to duck under her where possible. Time your lightning shots and use the parasol to block the cash.

SUPER UFO

■ A giant UFO attacks and slams from side to side before aiming straight down at Bub and Bob. It drops every five side slams, so be ready for it.

HOW TO BEAT THEM: Make fire pits in one corner leaving the other as a safe space. Stay central and move to the side of the UFO's attack.

MECHAZAURUS

■ A deadly giant mech that fires a boomerang at speed while randomly jumping about. It throws the boomerang one way then the next.

HOW TO BEAT THEM: Quickly fully charge a Star Strike and unleash. Rush to the other side and rinse and repeat to keep the boomerang going the opposite way.

SUPER TOM-KUN

■ This naughty jet fighter sends missiles that stun and has a flame-thrower. It doesn't follow players but will occasionally zoom towards them.

HOW TO BEAT THEM: Quickly grab the Water power-up and head up, time constant shots right and this boss can be stun-locked if you're fast enough.

BOSS OF SHADOW

■ One of the knights has transformed into a giant replica of Bub's dragon form. His movements are erratic but do aim toward the player.

HOW TO BEAT THEM: Keep charging the Water power-up and guide him downwards. Then quickly jump up and unleash your Tidal Wave attack.

I realised how well-designed it was for two players, so I followed its basic rules while aiming to create a game design which exceeded this. I also loved the visuals of Rainbow Island, so I used it as a model for the look of the game."

Parasol Stars built on its predecessor's look in several ways and Uchimura feels that, "*Parasol Stars*' visuals followed *Rainbow Islands*, meaning larger characters, so we expected this would mean a fixed screen would feel cramped, so side-scrolling was an essential choice. However, we also knew that scrolling and two players at the same time, especially in the action puzzle genre, was not a good mix, so stages were carefully adjusted so that players would gradually get used to the scrolling, and to prevent gameplay from being ruined by enemies and traps being hidden off-screen."

Uchimura was also involved in designing the levels and we asked about how the different level themes were decided. "I had the artist design many enemies in the early stages of planning, we exchanged ideas and expanded the game's world from there," he explains. "I decided that the final stage of the standard route would see the player return to Rainbow Star, and decided on themes for each of the other worlds while considering their difficulty level and concept.

"The visuals and audio are packed throughout with love for Taito. *Parasol Stars* is a console game, but the design is modelled on arcade games. The experience of seeing the game being steadily created based on the initial specifications and being able to check how it felt to play, both good and bad, with new ideas emerging as we went was a valuable one, and the first time I could truly feel the game systems coming to life." Uchimura weighs up which is best between *Bubble Bobble* and *Parasol Stars*. "Looking back, I feel *Parasol Stars*' core rules are hard to understand," he admits. "For example, it's not obvious which characters kill on contact, or which projectiles stun and which are fatal. From an objective point of view, with the confusing action, it didn't surpass *Bubble Bobble*, but I'm genuinely glad that some people rate it as a hidden masterpiece."

> **"I WAS PERSONALLY AIMING TO CREATE A GAME THAT WOULD BE COMPETITIVE WITH THE ARCADES, EVEN IF THE CONSOLE HARDWARE'S PERFORMANCE WASN'T ON THE SAME LEVEL"**
> **HARUO SUZUKI**

Yasuko Yamada worked on five *Bubble Bobble* games throughout the Nineties but his first project with the series was as the sound director for *Parasol Stars*. The soundtrack has a joyful tone and fast pace that compliments the bright graphics and arcade gameplay. When speaking about the main theme that plays throughout, Yamada says there are three main points to consider. "It needs to be melodious, the image for each track should be consistent, even if the feeling and approach differ from round to round, and [you need to] ensure the music doesn't grate, even with repeated listening."

He also tells us that, "For *Parasol Stars*, I was only in charge of the direction, but the composer, Mr Noriyuki Iwadare, is very familiar with composing for games, so I didn't need to give any direction on the points above and he delivered music which fitted my image perfectly." Many players have compared *Parasol Stars*' boss music to pop band Kaoma's 1989 single *Lambada*. When asked if this song was popular in the Taito office at the time, Yamada tells us that, "*Lambada* was extremely popular in Japan. I didn't make any specific request, but perhaps the trend at the time was an influence and we settled on the track as the boss theme."

The core systems, sound and controls for *Parasol Stars* were the responsibility of Haruo Suzuki. He also worked with the artists to help bring the game's distinctive mechanics to life. "Many of the programmers in the console team involved in the game were young and enthusiastic about their work," Suzuki explains. "I was personally aiming to create a game that would be competitive with the arcades, even if the console hardware's performance wasn't on the same level."

The hardware limitations didn't halt the team and Suzuki is keen to point out some of the great things they

» [PC Engine] Create a life-saving Miracle by collecting three Miracle Tokens and unleashing devastating attacks.

PARASOL STARS RETURNS

WHAT YOU CAN EXPECT FROM THE INCOMING RELEASE

Nowadays, you're rather limited if you want to enjoy *Parasol Stars* outside of emulation. That's due to change shortly, as ININ Games will be releasing digital versions of the cult platformer for PS4, PS5, Switch and Xbox. If you like your games to come on physical discs and cartridges, Strictly Limited Games has you covered as it will be releasing editions for PS4, PS5 and Nintendo's Switch for £26.78. Additionally, as well as the standalone versions of the game, you can also currently purchase a *Special Limited Edition* version for £44.64. This version not only includes the game, but also adds the game's original soundtrack on CD, an exclusive guide to playing the game, a colour manual and a box to store it all in.

While no other games are included, there are numerous quality-of-life options, including save states (after all, it can be quite a tricky game) as well as the ability to rewind gameplay. We've seen these options in similar releases from ININ and Strictly Limited Games and they can be extremely useful. Finally, you can expect all manner of shaders and filters, so that you can emulate CRTs, add scanlines and much more. *Parasol Stars* is available to preorder now and can be purchased from strictlylimitedgames.com

» [Switch] Even Death looks cute in *Parasol Stars*.

achieved. "The most appealing point is probably that the player is only given a magical parasol but can utilise items and objects to play through the game. At first glance, it looks like a fixed-screen platform game, but I'd love for players to find other ways to enjoy it, such as high-score chasing, or competing with a friend."

The team also had a huge challenge fitting all the data into the game. "*Parasol Stars* uses a three-megabit ROM," Suzuki explains. "But thanks to graphic compression and other tricks, it's four megabits of data. This was done because three-megabit ROMs were cheaper to produce. I also wanted the title screen's image to be as large as possible, so I looked into various compression algorithms and eventually settled on a PC compression in use at the time, called PIC-R. However, it took two to three seconds to decompress the image."

Kataru Uchimura also remembers the data limits. "I've good memories of asking Haruo Suzuki about the image compression algorithm when we were near the end of the project and the data was too big for the memory banks by two bytes, and we changed the pixel art so it would compress better and save us the two bytes, this saved the day," he says.

> "WITHOUT THE ARTISTS AND SOUND COMPOSERS HAVING A GRASP OF TAITO'S ACTION GAME TRADITIONS, WHICH OF COURSE BUBBLE BOBBLE AND RAINBOW ISLANDS FOLLOWED TOO, IT WOULD'VE BEEN IMPOSSIBLE TO BUILD"
> KATARU UCHIMURA

Parasol Stars pushes the PC Engine to its limits and Suzuki explains some of the tricks he used to accomplish this. "The core system was based on the principle of performing in-game processing during V-Sync interruptions," he explains. "However, I added a function which allowed time outside of these interruptions to be used to perform asynchronous processing. This meant it was possible to efficiently decompress data in the background without pausing the display. To calculate collision detection, the game first carries out a rough calculation, followed by one based on the pixel art of the graphic. This was to prevent players from being able to catch enemies just by standing still with the parasol out."

Suzuki also remembers the techniques he used to create the Taito logo seen in *Parasol Stars*. "The transition from a rotating

» [PC Engine] Use the Tidal Wave to take out enemies and items in hard-to-reach places.

» [PC Engine] You can rack up huge bonus points by performing well in the secret bonus round.

» [PC Engine] Creating point combos occasionally drops the bonus round power-up for an item-collecting break.

» [PC Engine] Although *Parasol Stars* is an official sequel, Uchimura says, "I personally thought of it as an offshoot to the main arc."

triangle to a circle leading into the Taito logo at game start-up is a technique composed of generative background characters and raster scrolling techniques," he explains. "At the time, console developers had no choice but to use a lot of small effects, so I aimed for something simple, utilising large movements which used as much screen real estate as possible."

He also thinks about what could have been improved in *Parasol Stars*. "Back then, once a game was released, there was no patching it to fix bugs, so it was very stressful up until the ROM was delivered. Unfortunately, I left a bug in where if the player dies with the Light Timer, and then continues, the effect remains until they get to the next stage. Would it have been better to pursue a little more exhilaration? Could I have reflected the artists' intentions better in the game? Looking back on it now, I can see many things I regret and things I could have done better, but at the time that was the best I could do."

Ultimately, Suzuki looks back fondly at his time with Taito and reflects on his place in the industry today. "The reason I joined the console division in the first place was because I wanted to make games more accessible and enjoyable at home," he tells us. "Nowadays, with the prevalence of smartphones, games can be enjoyed anywhere. In the past 30 years, the environment surrounding game hardware has evolved dramatically, and a world beyond the dreams of those early days has emerged. It was good to be involved in the industry from its early days, but given the choice, I would have liked to have been born a little later. I am grateful for the opportunity to look back at the past, reassess the present and think about the future."

Summing up his thoughts on designing *Parasol Stars*, Katura Uchimura says that, "Without the artists and sound composers having a grasp of Taito's action game traditions, which of course *Bubble Bobble* and *Rainbow Islands* followed too, it would've been impossible to build. If we had made the game from scratch, I wouldn't have been able to even convey an image, much less a complete game. Now I can see how valuable that was and how blessed I was. I would like to thank this project for allowing me to realise this."

Special thanks to Alice Brocca, our interviewees and Derek and Dan at PR Hound.

PARASOL POINT POWER

HOW TO SURVIVE RAINBOW ISLAND AND SCORE HIGH

POINTS MEANS PRIZES

■ *Parasol Stars* features bonus points that lead to extra lives that will mean the difference between success and game over. Stunning multiple enemies at once and then clearing them all out with one shot will create combos that multiply that points counter.

BEYOND THE PARASOL

■ A secret door can be found in each world by collecting three of the same Miracle items and defeating the boss. The level where the items are found causes all enemies to grant 100,000 points and a giant item appears after the boss fight.

IT'S A MIRACLE

■ Collecting three different Miracle items in a row will cause all enemies on the screen to be instantly stunned. It's a useful mechanic for levels with larger enemies that take many hits to take down. However, using this may mean losing the secret door item.

HIGH SCORES MATTER

■ At every level end, many point items appear. It's almost impossible to get them all so think logically about the route to take that will enable the most to be collected. Some items are worth more so head for any larger ones for maximum points.

» [Game Boy] Get your timing right and you can flip Marv right out of the circus tent.

» [Game Boy] Poor Kevin can't even escape Harry and Marv in his dreams. Home invasions will do that to a kid.

HOME ALONE 2: KEVIN'S DREAM

Having hit gold releasing games based on the popular Home Alone movies, publisher THQ dreamt up a brand-new adventure for crafty young Kevin McCallister... but it soon turned into a nightmare

Words by Martyn Carroll

IN THE KNOW

» **PUBLISHER:** THQ

» **DEVELOPER:** UNEXPECTED DEVELOPMENT

» **SYSTEM:** GAME BOY

» **DUE FOR RELEASE:** 1994

» A VidPro card, used by retailers to display what games they had in stock, has since surfaced, suggesting that the cancellation was at the 11th hour.

Photo credit: @PPLToast

The first mention of a new *Home Alone* spin-off was made in the May 1993 issue of US magazine *Electronic Gaming Monthly*. In an interview feature with Argonaut Software, which was focussed on the Super FX chip, boss Jez San let the details slip. "We've done a new SNES interpretation of *Home Alone 2* for THQ," he revealed, "but it's not based on the movie. We've taken the characters from the film and created a totally new game story involving them. It's probably going to be called *Kevin's Dream* or *Kevin's Nightmare*."

Obviously the game was never released and none of the key players at Argonaut can recall why. Jez draws a blank when asked about it, while producer Jon Dean can only speculate. "I do recall a lot of work going into the game," he says, "although I left the studio before it was finished, so I can't help with the reason why it was never released. I can offer some speculation though. The longer after the film's release it took to complete, the less valuable the IP would be in the market, and so THQ most likely opted to cancel."

Jon makes a good point. The *Home Alone 2* movie was released in October 1992, and Argonaut was working on the game in mid-1993, presumably targeting an end of year release. Would the concept be stale by then? It would seem so – except that the Mega Drive version of *Home Alone 2*, based directly on the movie, was released in late 1993. And then in the January 1994 issue of Nintendo Power, it was revealed that *Home Alone 2: Kevin's Dream* was still coming – but not for the SNES. The title was now Game Boy bound, with a vague release date of winter 1994.

Winter 1994 came and went, with no sign of a *Kevin's Dream* game pak beneath the Christmas tree. More movie sequels came and went, and over time the first two films established themselves as perennial festive favourites. Then in 2020, *Kevin's Dream* made a loooong overdue appearance, as part of the infamous 'Lot Check leaks'. Lot Check is a Nintendo Of America process that reviews and approves all games prior to release. Hackers managed to infiltrate Nintendo's servers and download gigabytes of game data that had been submitted

THE LITTLE MACK GAMES THAT MADE IT

HOME ALONE
1991, IMAGINEERING INC

■ Kevin must protect his family's possessions while fending off Harry, Marv – and a giant furnace? Plenty of liberties are taken, but this is a fun Game Boy adaptation of the hit movie, designed for young kids.

HOME ALONE 2: LOST IN NEW YORK
1992, IMAGINEERING INC

■ Kevin returns in an awful Game Boy licence. The collect-'em-up gameplay from the first game is replaced by a random run-around that even little tykes will scoff at. Makes the OK original look like *Super Mario World*.

THE PAGEMASTER
1994, PROBE SOFTWARE

■ Another Little Mack movie produces another platformer, but this Probe effort is pretty good. Presentation is decent for a Game Boy game and there's plenty to entertain the seven people who enjoyed the film.

» [Game Boy] In space, no one can hear Kevin scream…

» [Game Boy] Up in the clouds it's raining cats and dogs, quite literally.

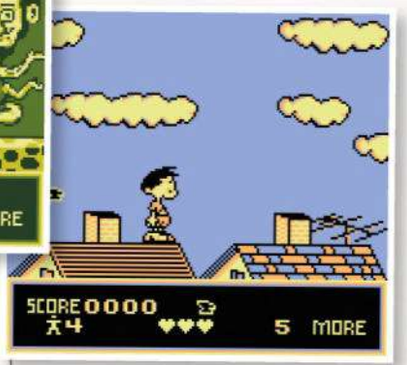
for checking. The vast majority were published games, but it also exposed a number of finished yet unreleased titles – and one of those was the Game Boy version of *Kevin's Dream*.

Now we could play the game and finally experience the slumberland shenanigans implied in the title. Truth be told, the game is a routine 2D platformer, although the original premise does allow for some imaginative elements. Each stage is a dream in Kev's head, triggered by the toys he sees on his bedside cabinet before he nods off. A clown leads to a circus dream, a rocket leads to a space dream, and so on. Burglars Harry and Marv show up in each dream, transformed into monsters to fit the theme of the dream. This culminates in a final battle against a conjoined Harry-Marv abomination that looks like something out of *The Thing*.

The in-game credits reveal that it was created by Unexpected Development, who specialised in handheld titles. The programmer was Dagan Galarneau, although he's quick to deny it. "I don't actually recall working on that game," he says. "I thought it was somebody else at Unexpected. I was probably so embarrassed about working on a *Home Alone* game I repressed the memory." That's perhaps understandable, but why wasn't it released? "I believe when we finished the game the publisher decided that *Home Alone* was out of favour and *Bobby's World* was hot…"

» [Game Boy] You gotta be kidding me! Harry and Marv combine for the final boss battle.

» [Game Boy] Besides new sprites, the *Bobby's World* reskin also adds Super Game Boy support, meaning more colour.



Here the story takes another turn. *Bobby's World* was a popular cartoon show that had been running on Fox Kids since 1990. The title character was always dreaming up fantastic situations, so THQ spotted a potential better fit for the concept. Kevin was swapped for Bobby, and Harry and Marv were replaced by Bobby's siblings, but it was essentially the same game. And it befell the exact same fate, being denied a release and then rediscovered years later in the Lot Check leaks. Both versions were the victim of business decisions, but at least they're now out there. While that's not exactly a dream come true, it is a happy ending. ✱

"I was probably so embarrassed about working on a Home Alone game I repressed the memory"

Words by Dagan Galarneau

SO YOU WANT TO COLLECT...

LUCASARTS GAMES

From point-and-click perfection to Star Wars wonders, LucasArts – originally and latterly known as Lucasfilm Games – is synonymous with superb adventures. Here are some noteworthy collectables that may tempt you to select Pick Up from your inner SCUMM Engine menu

Words by Graham Pembrey

» [PC] Getting past these deadly piranha poodles requires some ingenuity.

EXPECT TO PAY £45+ USA

EXPECT TO PAY £32+ EUROPE

EXPECT TO PAY £50+ JAPAN

BOUNTIFUL BUCCANEERING

THE SECRET OF MONKEY ISLAND

DEVELOPER: LUCASFILM GAMES
RELEASE: 1990

■ Somewhere, deep in the Caribbean, wannabe-pirate Guybrush Threepwood began his journey and charmed a generation of gamers in this seminal graphic adventure. Ron Gilbert's most famous game married warm-hearted, goofy humour with brilliant pixel-art backdrops and pleasing puzzles. It sold well on release, but not to an extent that matches current levels of fandom for the series, meaning copies are in high demand. This is even more the case when the Dial-A-Pirate copy-protection wheel – a circular, cardboard contraption for lining up pirate face parts – is present and intact.

Although UK budget-label release versions start at around £30, first edition Amiga and Sega Mega-CD copies can easily go for £60 or more. For a complete IBM PC big-box edition, you'll be looking at somewhere in the region of £130 and upwards. The Japanese Sega Mega-CD game is quite rare, but rarer still is the Japanese FM Towns version – the only copy we could find for sale anywhere had attracted 27 watchers at an asking price of £865.

SWASHBUCKLING SEQUELS

Which follow-ups are worth your pieces of eight?

■ Arguably just as cherished as the original, and more ambitious in storytelling and scope, *Monkey Island 2: Le Chuck's Revenge* commands similar prices as a collectible. The Amiga version came on 11 floppy disks, which may prove a challenge if you want to pick up a fully tested, working copy for its £75 asking price. The next sequel, *Curse Of Monkey Island*, lacked involvement from the original development team but has many fans, including series creator Ron Gilbert who incorporated aspects of the story in his 2022 comeback success *Return To Monkey Island*.

Copies of *Curse* start at around £15. To play the entire initial trilogy for less, you could seek out the *Bounty Pack* three-CD compilation for PC. Slightly cast out from the pack is the fourth instalment, *Escape From Monkey Island*, which had 3D graphics and fewer plaudits, and can be found on PC or PlayStation 2 for around the £3 mark.

» [PC] During pilot training you'll learn to squeeze your ship through narrow spaces.

» [PC] The cutscenes in *X-Wing* were hugely impressive with some superb dogfight sequences.

WINGING IT

STAR WARS: X-WING

DEVELOPER:	LUCASARTS
RELEASE:	1993

When George Lucas launched a games division of Lucasfilm in 1983, he had already granted other companies the rights to make *Star Wars* games. Ten years later, he was able to bring that development control back in-house (albeit working with contractors who would later form Totally Games) with *Star Wars: X Wing*. The 3D space combat simulator placed PC gamers in the cockpit of a Rebel Alliance starfighter to strikingly cinematic effect. It was also the first game outside of LucasArts graphic adventures to use the iMUSE system, which harmonised shifts in music with action unfolding on the screen. Sequels included *Tie Fighter* and *X-Wing Alliance*.

White Label or EA Classics budget releases could be yours for as little as £5, but you can expect to pay £15 for first edition boxed copies or the CD *Special Edition*. The US Gold-published UK box sells for slightly less than the purely LucasArts-branded US one, so keep that in mind.

» [C64] After a text adventure-style intro, David Bowie appears dramatically on the screen.

» [C64] You'll meet many key characters from the Jim Henson-puppeted film.

DANCE, MAGIC DANCE

LABYRINTH: THE COMPUTER GAME

EXPECT TO PAY
£70+
EUROPE/USA

DEVELOPER:	LUCASFILM GAMES
RELEASE:	1986

The arrival of *Labyrinth: The Computer Game* on the Commodore 64 and the Apple II marked two important firsts for George Lucas' game studio. On the one hand, it was the company's debut film tie-in. But it was also its first graphic adventure, representing a shift from the space-based action of *Rescue On Fractalus!* and *Koronis Rift*. Building on the foundations laid by more straightforward text adventures that had come before, the game used a 'word wheel' to allow players to interact with the fantasy world of the film. Expect to pay upwards of £70 if you can find a Commodore 64 cassette version, or more for the even rarer Apple II disk edition.

A FATEFUL ENCOUNTER

INDIANA JONES AND THE FATE OF ATLANTIS

EXPECT TO PAY
£48+
USA

DEVELOPER:	LUCASARTS
RELEASE:	1992

The most-celebrated *Indy* game by LucasArts was initially intended to be based on an unused film script for the whip-slinging hero. But designers Hal Barwood and Noah Falstein decided they could do better and concocted an original story for their sprawling point-and-click puzzler, which delivers wonderfully witty dialogue and clever story branching that gives your choices real consequences.

As with other LucasArts games, big-box IBM PC editions are highly prized by collectors and could set you back hundreds of pounds. Amiga editions are relatively much more affordable. There are lots of variants to hunt down, including a CD 'talkie' version with voice-overs. Look out for the hint book that should be enclosed with first edition copies.

EXPECT TO PAY
£40+
EUROPE

» [PC] The game earned praise for its story and detailed locations.

» [PC] Sophia Hapgood is your witty companion for much of the game.

WHIP IT!

More Indy escapades

The Last Crusade

Two *The Last Crusade* titles debuted in 1989: a graphic adventure and an action game. The adventure game by Ron Gilbert, David Fox and Noah Falstein laid some technical groundwork for *Monkey Island* and comes with a faux-handwritten, age-stained Grail Diary. The action game, developed by Tiertex, is a simpler run-and-whip platformer released for various platforms to mixed reviews. Take care not to confuse the (sometimes similar) boxes when hunting down either.

The Infernal Machine

Fate Of Atlantis designer Hal Barwood returned to the popular franchise with *Indiana Jones And The Infernal Machine* in 1999. Reviewers generally rated the third-person, 3D action game highly and described it as a new take on the formula of *Tomb Raider* but with more focus on puzzles. The PC original received a Nintendo 64 port care of Factor 5, a loose US edition cartridge of which recently sold for £52.

Extra, extra
Read all about it in newspapers, diaries and hint books. LucasArts often included extras like these so check whether any are missing before you bid.

Try compilations
Despite not being as valuable as individual releases, compilations like the *LucasArts Archive* and *LucasArts Classics* bundles are generously packed with pairings of great games.

Be adventurous
Gain some extra collector kudos by tracking down all 14 issues of *The Adventurer*, a LucasArts magazine that came with unique features and developer interviews.

Verify versions
Before you pay a premium make sure it's not an inflated price for a less rare release of a game. Version differences can be subtle.

WHERE SCUMM BEGAN

MANIAC MANSION

EXPECT TO PAY £40+ USA

EXPECT TO PAY £42+ EUROPE

DEVELOPER: LUCASFILM GAMES
RELEASE: 1987

B-movies, horror films and comedy inspired Ron Gilbert and Gary Winnick to pen a story about a kooky group of high-school friends stranded in a spooky house. Dissatisfied with text parsers, the team devised an intuitive point-and-click interface using a new engine: the Script Creation Utility for *Maniac Mansion*, or SCUMM for short. SCUMM is at the heart of most LucasArts adventure games and its legacy continues in the free programme ScummVM, used to play the games on modern machines.

You'll find various prices for *Maniac Mansion*, from loose NES cartridges for £14 and Japanese Famicom carts for £25, to boxed NES, PC, Amiga and Commodore 64 copies selling for hundreds in top condition.

» [PC] One novel aspect of *Maniac Mansion* was the ability to switch between characters.

» [PC] Take care in the mansion – unlike most LucasArts games, characters can be killed off.

TENTACLE TIME

An otherworldly sequel

The characterful cast of *Maniac Mansion* reunited in 1993 for *Day Of The Tentacle*. Project leads Dave Grossman and Tim Schafer (the latter of Double Fine Productions and *Psychonauts* fame) crafted another classic with bright, cartoon graphics and devious character-swapping puzzles. You can also play the whole of *Maniac Mansion* inside the game, by loading up a computer in Weird Ed's bedroom that looks very similar to a Commodore 64.

Original boxed copies can be tracked down for £40 if you're lucky but generally they cost far more. Newer releases are also valuable, whether the 2016 remaster or the collector's editions published in 2022 by Limited Run Games for Xbox, PlayStation 4 and PC. You may also want to seek out a cheaper bundle that includes *Sam & Max Hit The Road*, another LucasArts point-and-click gem. It stars a duo of anthropomorphic detectives designed by Steve Purcell who later worked for Pixar.

AWESOME OUTLIER

ZOMBIES ATE MY NEIGHBORS

EXPECT TO PAY £36+ USA

EXPECT TO PAY £27+ EUROPE

DEVELOPER: LUCASARTS
RELEASE: 1993

Described by its game designer Mike Eberts as being "like an arcade game on a console", *Zombies Ate My Neighbors* might have been created in shared office space with the *Day Of The Tentacle* team, but it was worlds apart in terms of gameplay. Across a diverse set of 55 main levels and other hidden ones, your goal is to run, gun and rescue your neighbours while managing your resources carefully.

We found loose SNES carts from £12, boxed Mega Drive games from £27, and boxed SNES versions in good condition going for as much as £80. Clearly there are quite a range of options for collectors, even before mentioning the Limited Run Games release for Nintendo Switch, which includes the sequel *Ghoul Patrol*.

» [SNES] When you're on the hunt for LucasArts' game, just been mindful that it's known as *Zombies* here.

» [SNES] Backyards are your playground – there are loads of great moments of environmental interaction.

DEAD GOOD

GRIM FANDANGO

DEVELOPER: LUCASARTS
RELEASE: 1998

Often considered a last hurrah for the golden age of LucasArts adventure games, *Grim Fandango* brought the house down with a stunning mix of Mexican folklore, art deco-style, and a film noir storyline with a sweeping string soundtrack. The tank controls and cryptic puzzles may not have been everyone's cup of tequila, but continued adulation for the game helped bring it back in 2014 when Double Fine Productions acquired the license to create a popular remaster on modern platforms.

You'll probably come across a glut of PC copies in a smaller box from the budget *LucasArts Classics* range for as little at £5. As that budget box was released years after launch, we've based our sticker estimate (like all our entries) on the rarer big-box original copies with a lovely two-CD gatefold sleeve inside that go for £55 upwards in good condition. We even found a sealed copy in the US that sold recently for £535.

EXPECT TO PAY £60+ USA

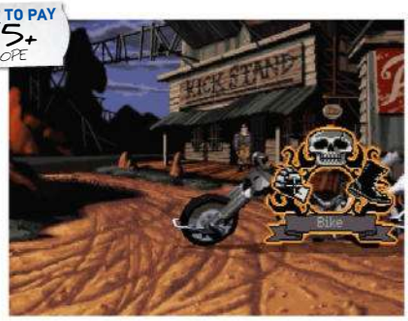
» [PC] Glottis is a deep-voiced, big-hearted elemental spirit who plays a big part in your adventure.

EXPECT TO PAY £55+ EUROPE

» [PC] From shadowy scenes to colourful fiestas, the atmosphere shifts throughout the game.

EXPECT TO PAY £45+ EUROPE

» [PC] Head out on the highway: *Full Throttle* has a lot of fun with its biker gang theme.



» [PC] The menu of prior SCUMM Engine games was simplified to a few visual options.

EASY RIDER

FULL THROTTLE

EXPECT TO PAY £57+ USA

DEVELOPER: LUCASARTS
RELEASE: 1995

■ This is another fine Tim Schafer creation, and just like *Day Of The Tentacle* and *Grim Fandango*, one that he was later able to remaster at Double Fine Productions once the company acquired the rights. Biker gangs and shady business dealings are at the centre of the intriguing storyline, which takes you through dingy bars and greasy garages, then out onto the open road for *Road Rash*-style action sequences that intersperse the point-and-click puzzle proceedings. It's relatively less taxing than other LucasArts games too, making for a comparatively easy ride. [Very good - Ed]

While you can play the game digitally on most platforms these days, including mobile versions for iOS and Android, getting hold of a physical copy shouldn't set you back too much. Interestingly, complete copies seem to be comparatively rarer in the US than they are in Europe. A bundled edition pairing the game with the Steven Spielberg-sponsored space adventure *The Dig* is even cheaper.

EXPECT TO PAY £40+ EUROPE

EXPECT TO PAY £143+ USA

» [PC] Our story begins with Zak lying in bed, having weird and wonderful dreams.

TPC
THE PHONE COMPANY
Give ticket to representative
Push Open Walk to Put on Turn on
Pull Close Pick up Take off Turn off
Give Read What is Use
ticket

» [PC] The nose and glasses don't fool us… that shop attendant is looking suspiciously alien.

CRACKING FUN

ZAK MCKRAKEN AND THE ALIEN MINDBENDERS

DEVELOPER: LUCASFILM GAMES
RELEASE: 1988

■ The second game to use the SCUMM engine was an irreverent globe-trotting adventure, putting you in the shoes of newspaper reporter Zak McKraken as he investigates extra-terrestrial happenings. For a complete copy of David Fox's creation, look out for a replica National Inquisitor newspaper, a hint book and a pair of red-shaded glasses for decoding hints. Like several other LucasArts and Lucasfilm games, *Zak McKraken* was recently re-released by Limited Run Games, but it's the first edition boxes with all those original collectables that are most sought after. A budget European edition on Kixx XL is much cheaper, while a Japanese FM Towns edition with distinctive anime artwork is uber rare; we didn't find any recently sold, but it's out there somewhere.

FPS PIONEER

DARK FORCES

EXPECT TO PAY £25+ EUROPE

DEVELOPER: LUCASARTS
RELEASE: 1995

■ With a remaster by Nightdive Studios set to land soon, it feels there's been a groundswell of renewed appreciation for this boundary-pushing shooter, which you can find encapsulated extensively in **Retro Gamer** issue 251. It's hard to overstate how exciting it was in 1995 to step into the *Star Wars* universe in a game that rivalled *Doom*, while adding the ability to look around the environment and jump – FPS elements we completely take for granted now. Thankfully, the game itself remains cheap, with complete big-box versions rarely passing £25 – budget editions are even cheaper. The PlayStation release arrived a year later and was less well-received due to its comparatively choppy graphics. Prices for that version start from £15.

EXPECT TO PAY £20+ USA

» [PC] Shooting and strafing in *Star Wars: Dark Forces* were joined by jumping, crouching and looking around: all novelties at the time.

JEDI DELIGHTS

How LucasArts followed Dark Forces

Jedi Knight: Dark Forces II

In this technically advanced sequel you can both use The Force and wield a lightsaber. As if those weren't selling points enough, you can also step out of first-person view and take a third-person perspective. Copies aren't too expensive either – around £20 for a big-box version in good condition.

Jedi Knight II: Jedi Outcast

Developed by Raven but published by LucasArts, this 2002 release continues the adventures of our protagonist Kyle Katarn by putting more emphasis on storytelling and satisfying third-person lightsaber combat. GameCube and Xbox copies can be yours for as little as £5.

Peripheral Vision

TurboStick

» **PLATFORM:** TurboGrafx-16 » **YEAR:** 1989 » **COST:** $39.95 (launch), £65+ (today, boxed), £30+ (today, unboxed)

Though the success of the NES had popularised the joypad as the dominant controller for use on home consoles by the end of the Eighties, joysticks were still the preferred option for many players – after all, the arcades were still the home of cutting-edge gaming at the time. So it should come as no surprise that NEC introduced the TurboStick for the TurboGrafx-16, a large arcade-style joystick featuring turbo fire buttons with adjustable rate sliders and a Slow-Motion button.

Like many console joysticks of the era, the TurboStick doesn't quite offer the arcade experience. It's a rather light device and neither the stick nor the buttons contain microswitches, which means it doesn't give the same feeling of precision. The sliders are also somewhat prone to breaking. While the Japanese PC Engine was well served with some excellent arcade sticks, this was about as good as it got for American gamers. That left the TurboStick as an unspectacular, but at least somewhat appreciated item within NEC's range of accessories.

ESSENTIAL GAME
SPLATTERHOUSE

Since the default TurboPad already has turbo fire options, the main advantage for the TurboStick has to be the feeling of familiarity that comes with an arcade-style controller. Namco's grisly beat-'em-up is one of the most notable arcade conversions on the TurboGrafx-16, in part because NEC's system was the only one that allowed American gamers to continue Rick's war against supernatural horrors in the comfort of their own homes. The TurboStick gave players a welcome opportunity to bring some of their arcade muscle memory to bear against the demonic hordes.

TurboStick fact

■ TurboGrafx-16 controllers, the TurboStick included, require an adapter for compatibility with TurboDuo consoles and Japanese PC Engine hardware as these machines have smaller control ports.

SUPPLIED BY **EVAN AMOS**

THE EVOLUTION OF Disney's Illusion Games

SEGA AND DISNEY'S CASTLE OF ILLUSION WAS A LANDMARK TITLE FOR THE MEGA DRIVE, AND IT INSPIRED A NUMBER OF SEQUELS. CREATIVES STEPHAN BUTLER, ARA SHIRINIAN AND AJ GRAND-SCRUTTON EXPLAIN HOW THE ILLUSION SERIES EVOLVED

Words By Rory Milne

Unusually for an early Nineties console title, *Castle Of Illusion Starring Mickey Mouse* required not just one but three teams. Sega Of Japan was responsible for designing and coding the game, but just as importantly the project was directed by its sister company Sega Of America with regular input from Stephan Butler at Walt Disney, as the former Disney creative points out. "I was the producer on the Disney side," Stephan explains. "I worked with Sega's producer Jim Huether, primarily up at Sega Of America. Disney wasn't directly involved with Sega Of Japan, but all three of our groups became close as we worked through the design elements and got the game to the point where it adhered to Disney's standards."

What Stephan describes sounds straightforward, but while *Castle Of Illusion* would in time feel just like playing a Disney animation, getting it to those lofty heights wasn't at all smooth sailing until the approaches of its teams became aligned. "Sega Of Japan's initial design was a typical platform game design, and it was surprised that the rules we had at Disney required that design to be changed," Stephan says of the first draft. "However, the team in Japan ultimately did a great job of making its rendition of Mickey true to the spirit of the Disney character. At the same time it provided a platform title with some awesome gameplay, which was helped by the fact that it had developed a great engine."

> "IN SEGA OF JAPAN'S ORIGINAL DESIGN MICKEY HAD A KNIFE FOR A WEAPON, SO I HAD TO MAKE CLEAR THAT STUFF LIKE THAT JUST WASN'T GOING TO WORK"
> **Stephan Butler**

Going into more detail on the requirement for *Castle Of Illusion* to depict Mickey in the Disney style, Stephan recalls a misunderstanding of the mouse's modus operandi. "It was important that Mickey maintained his character," Stephan notes. "That was the biggest challenge I had, because Mickey couldn't just be tossed into any scenario. To give an example, in Sega Of Japan's original design Mickey had a knife for a weapon, so I had to make clear that stuff like that just wasn't going to work."

Of course, as well as ruling things out Stephan also suggested additions to *Castle Of Illusion*, such as Mickey's memorable antics when he was idle or on platform edges. "The thing I like to share in terms of my contributions is the standing animation," Stephan reflects. "Up to that point, when you stopped playing the game your character just stopped – Mickey just froze. So we added an animation for when he was waiting for input, and for when he got too close to an edge. Those little touches were huge."

The end result of the hard work put in by Stephan and two divisions of Sega was nothing short of phenomenal, and to many players it seemed like a cartoon in videogame form. Whimsical challenges like racing from giant apples, bouncing on spiders in sprawling webs and being turned upside down in a dreamlike toy room appealed to children of

» [Mega Drive] For their time, the whimsical challenges depicted in *Castle Of Illusion* look stunning.

» *Castle Of Illusion* producer Stephan Butler now runs a home-improvement firm.

» Ara Shirinian was design lead on *Power Of Illusion* and is now an independent developer.

» Delala Studios CEO Aj Grand-Scrutton was the creative director of *Disney Illusion Island*.

STAGES OF EVOLUTION:
SCENIC STAGES

THE CARTOON-LIKE LEVELS OF THE ILLUSION SERIES

CASTLE OF ILLUSION

The entire game feels like playing a cartoon, but *Castle Of Illusion*'s finale could be taken straight out of a Disney movie. It's a cinematic boss fight where you face Mizrabel, an evil witch who conjures up spirits to attack you while you try to defeat her and free Minnie.

WORLD OF ILLUSION

Mickey and Donald's antics in *World Of Illusion* are pure Disney. It's the game's little touches that best bring to mind the pair's animated adventures, like the level where they're crossing chasms in a blind panic by running over the seriously unsafe bridges that span them.

LAND OF ILLUSION

A lot of *Legend Of Illusion*'s mechanics could only work in a cartoon, like when Mickey shrinks to fit into small spaces or falls through an hourglass. Most cartoon-like, though, is *Legend*'s giant beanstalk stage, where he climbs up the enormous plant while fending off foes.

» [Mega Drive] Mickey butt bounces on foes in *Castle Of Illusion* rather than stamping on them.

» [Master System] Just like with the Mega Drive version, you can bounce on multiple ghosts to reach new areas.

» [Mega Drive] *Castle Of Illusion*'s toy room helps the game live up to its name by turning things upside down.

» [Mega Drive] If Mickey gets close to falling off a platform in *Castle Of Illusion* he teeters.

all ages and the child in every gamer. While many loved the gorgeous-looking Mega Drive game, a subsequent Master System version was every bit as good, and some thought it was even better.

The success of *Castle Of Illusion* on both formats duly led to a follow-up called *World Of Illusion Starring Mickey Mouse And Donald Duck*, although this time it was a Mega Drive exclusive. Unlike its predecessor, it incorporated a two-player co-op mode, which required Mickey and Donald to work together to overcome challenges. These collaborations included hoisting each other up on ropes, Mickey hauling Donald through tight gaps when he got stuck and the two friends taking turns jumping on opposite ends of a mine cart in order to drive it safely past hazards.

World Of Illusion also differed from *Castle Of Illusion* in that Mickey had a magic cape attack in the follow-up, as did Donald. This close quarters conjuring allowed the pair to make opponents vanish by simply wrapping their enchanted capes around them, and it was far from the only magical mechanic found in the game. Each time a boss was defeated in *World Of Illusion*, Mickey and Donald learned a new magic trick, such as turning a rug into a magic carpet, creating an air bubble large enough to navigate underwater levels in and making bridges across chasms out of packs of animated playing cards.

Although equally good when played solo, *World Of Illusion*'s two-player mode was the main attraction for a teenage Aj Grand-Scrutton, who would go on to set up a studio decades later that would develop its own *Illusion* title. "*Castle Of Illusion* and *World Of Illusion* were just beautiful games," Aj enthuses. "The developers did such a good job of capturing the Disney magic. But I truly believe *World Of Illusion*, especially, has really survived the test of time. I still think that game is wonderful to play now. Myself and my CIO Mark Ragon, who is also my childhood best friend, used to

STAGES OF EVOLUTION:
ANIMATED ANTAGONISTS

MEMORABLE OPPONENTS FROM THE ILLUSION GAMES

LEGEND OF ILLUSION

Aspects of *Legend Of Illusion* take inspiration from *Alice In Wonderland*, like its animated chess-piece enemies. Continuing this theme is its most impressive boss, a colour-changing caterpillar that Mickey has to cut down to size by carefully aiming bars of soap at its head.

EPIC MICKEY: POWER OF ILLUSION

The boss fights in *Power Of Illusion* against Jafar and Mizrabel are visually impressive, but the battle against Captain Hook is more fun. The craven pirate alternates between charging at you, cutlass drawn, and dropping bombs with short fuses on you from his ship's rigging.

DISNEY ILLUSION ISLAND

The bosses in *Illusion Island* are bested with platforming ability, and one of its meanest mayors is simply called Thief #1. You beat him by jumping on switches, which you reach by leaping, gliding and wall-jumping between platforms and conveyor belts while avoiding hazards.

» [Mega Drive] In *World Of Illusion*'s two-player mode Mickey and Donald can hoist each other up on ropes.

» [Master System] There's a dazzling array of bosses to battle in the Master System game and many are unique to the 8-bit version.

» [Master System] He might look cute, but this boss will make short work of you if you're not careful.

play it almost every year. Even when we were at college and university we would come back at some point each year and play it end to end."

> "I TRULY BELIEVE WORLD OF ILLUSION, ESPECIALLY, HAS REALLY SURVIVED THE TEST OF TIME. I STILL THINK THAT GAME IS WONDERFUL TO PLAY NOW"
> Aj Grand-Scrutton

A year after Aj first experienced *World Of Illusion*, the popular Mega Drive title received a follow-up, although it appeared on Sega's Master System and Game Gear as opposed to the more powerful 16-bit system. This was a savvy move for its developer Sega Of Japan, given that the Game Gear and the latest iteration of the Master System had just been released a few years earlier. Given the single set of controls on the handheld Game Gear, it followed that *Land Of Illusion Starring Mickey Mouse* lacked the two-player option that its predecessor had been praised for, but the 8-bit sequel made up for this with novel mechanics based around the environments that Mickey found himself in.

Among the settings chosen for *Land Of Illusion*'s stages were levels that took inspiration from the classical elements: air, water, fire and earth. The game's opening stage saw Mickey blown about by winds, some that took him safely over hazards and others that required him to cling onto vines until they passed. A later level saw the plucky mouse swimming through danger-filled lakes with only a limited supply of air, and a subsequent one tasked the hero with sprinting through a blacksmith's castle while being pursued by living flames. Then, last but not least, he had to venture underground into a dimly lit world of vertical shafts and horizontal tunnels dug out of the earth.

These subterranean stages allowed for some of the most memorable mechanics in *Land Of Illusion*, since their level designs incorporated tunnels that were far too small for Mickey to fit into without first using a newfound ability to shrink down in size. At the ends of these diminutive passageways, the hero would often find vertical shafts with platforms too high to be reached in his shrunken form. Of course, the solution was to grow back to full size, and then stay that way until he encountered the next confined corridor. Perhaps best of all, Mickey retained ▶

» [Master System] Mickey gets blown about by both harmful and helpful winds in *Land Of Illusion*.

» [Master System] In keeping with its predecessors, *Land Of Illusion* has water-based challenges.

» [Mega Drive] Magic tricks such as turning enemies into bridges are a recurring feature in *World Of Illusion*.

these shrinking and expanding powers for use in some of the game's later stages.

Land Of Illusion came out to sparkling reviews, and a couple of years later another *Illusion* title appeared. Initially, *Legend Of Illusion Starring Mickey Mouse* was a Game Gear exclusive, but a Master System version was released three years later. The most immediately obvious aspect of the handheld platformer was its mediaeval theme, which was represented by an opening level set in a village from that era, a focus on kings and kingdoms, and the colourful serf outfit worn by its player character. This even included a green peak cap, no doubt inspired by the one worn by Robin Hood in Disney's animated movie. However, the game's mediaeval theme proved flexible enough to encompass off-motif stages, including modern urban and crystalline levels. Otherwise, *Legend Of Illusion*'s environments fitted the times suggested by its initial stage, with the most interesting of these taking place on the forest floors and in the treetops of woodlands, and in partially sunken ruins.

> "IT FELT CHEAP IF YOU DIDN'T PRESS THE BUTTON QUICKLY ENOUGH TO PERFORM THE ATTACK. SO WE MADE JUMPS ONTO FOES AUTOMATICALLY END IN A BUTT BOUNCE"
> Ara Shirinian

More so than previous *Illusion* titles, *Legend Of Illusion* incorporated obstacles that players had to work out how to overcome, and these came in all shapes and sizes. In the game's jungle stages, Mickey had to swing from one monkey's tail to another, and use coiled snakes hanging from trees to propel himself upwards. In its modern-day city level there were challenges that required the heroic rodent to use coloured blocks to turn bricks in building walls into makeshift platforms. Then its water-logged ruins incorporated pulleys and levers that shut down magical barriers, and its crystal world level involved refracting light to make hidden platforms appear.

Perhaps because of *Legend Of Illusion*'s focus on puzzles and the fact that some of its inhabitants were friendly, Mickey only had one attack in the game. More specifically, he could throw items at foes, either bars of soap, which he had endless amounts of, or certain objects that he found. On the surface, this seemed a little unfair, given that Mickey could butt bounce on foes in *Castle Of Illusion* and *Land Of Illusion*, and magic opponents away in *World Of Illusion* – and that's not to mention that he could use apples he collected in *Castle Of Illusion* as ranged weapons. That said, the enemies in his latest *Illusion* outing could often be avoided if care was taken.

Although already distinct from earlier titles in the *Illusion* series in many ways, *Legend Of Illusion*'s final stage before its boss-fight finale took a genuinely unexpected turn. Like its predecessors, it was unapologetically a platform game, albeit one that spanned multiple different platforming standards.

» [Mega Drive] As with *Castle Of Illusion*, there are swimming challenges in its sequel *World Of Illusion*.

» [Master System] A novel aspect of *Land Of Illusion* sees Mickey shrinking to get through narrow passageways.

» [Game Gear] *Legend Of Illusion* initially has a mediaeval look, although some later levels diverge from this theme.

» [Game Gear] Mickey uses bars of soap in *Legend Of Illusion* much like he uses apples in *Castle Of Illusion*.

» [Game Gear] In a first for the *Illusion* series, there's a shoot-'em-up stage in *Legend Of Illusion*.

However, the last challenge it set players before facing its big boss took the form of a side-scrolling shooter. As with *Legend Of Illusion*'s previous levels, this shoot-'em-up challenge saw Mickey armed with bars of soap. The difference being that he was now riding on a giant dragonfly soaring through the night sky, and using his soap projectiles to bring down shooting stars and blow up coloured baubles.

In early 1995, *Legend Of Illusion* came out to much acclaim, but after its release the *Illusion* series came to a halt. Then in 2012, *Epic Mickey: Power Of Illusion* was announced, which its design lead Ara Shirinian describes as a love letter to *Castle Of Illusion*. "We were all really huge fans of *Castle Of Illusion*, and it was something that was really special for me growing up," Ara says with a grin. "I remember the time that game first came out, and the graphics were astonishing back then. I would still say there's something really special about it that not a lot of other games of the time captured. In a lot of ways, we were trying to recreate that magic with *Power Of Illusion*."

Although clearly an inspiration, Ara didn't view *Castle Of Illusion* as absolutely perfect, and so some changes were made to its formula when devising its successor. "We loved the butt bounce, but it felt cheap if you didn't press the button quickly enough to perform the attack," Ara acknowledges. "So I think it was natural that we made jumps onto foes automatically end in a butt bounce in *Power Of Illusion*. We also felt that if we were going to make something a threat then it should be a significant threat, although we devised various attacks for players to subvert them. Then we used the bottom screen for painting challenges, where if you painted on the lines you got a perfect score."

STAGES OF EVOLUTION: CARTOON CHALLENGES

TESTS OF SKILL SET BY THE ILLUSION TITLES

WORLD OF ILLUSION

Some of *World Of Illusion*'s most novel tests of skill are in its two-player mode, and its mine cart challenge is no exception. Players take turns making their character jump on opposite ends of the cart, which drives it through the troughs and peaks of a hazard-filled mine.

CASTLE OF ILLUSION

Of the *Castle Of Illusion* remake's new challenges, its rotating signpost is of particular note. It has signs pointing to multiple exits, which all take you back to the signpost. But each time you take an exit a sign vanishes, and once they're all gone the real exit appears.

DISNEY ILLUSION ISLAND

Aside from testing your platforming prowess, *Illusion Island* also presents you with some logistic challenges. Its locked doors demand exploration, as they require not one but three keys, and these are spread over wide expanses of terrain that are often tricky to negotiate.

STAGES OF EVOLUTION:

CONVERSION CAPERS

THE DIFFERENT TAKES ON CASTLE OF ILLUSION

THE 8-BIT CONSOLES

The Master System and Game Gear *Castle Of Illusion* have similar settings to the Mega Drive original, but their level layouts and designs are entirely different. The goal is still to defeat Mizrabel and free Minnie, but the challenges you face are unique to the 8-bit titles.

THE REMAKE

Although it's technically a remake of the Mega Drive version, the 2013 iteration is actually more of a reboot. As well as reimagining the original's levels in 2.5D and 3D, it expands those stages to include various fresh features, and it adds some entirely new challenges.

THE MOBILE RELEASES

The iOS and Android adaptations of the console and PC remake look and sound identical to the games they followed, but they play very differently. This is because of their touch-screen controls, which are excellent, but require practice given the tricky platforming involved.

» [3DS] The platforming in *Epic Mickey: Power Of Illusion* feels like it's straight out of *Castle Of Illusion*.

» [3DS] A shoot-'em-up element is facilitated by Mickey's paintbrush in *Epic Mickey: Power Of Illusion*.

In terms of its environments, *Power Of Illusion* took the *Illusion* series in a new direction by having stages based around Disney film settings, although its levels still recalled *Castle Of Illusion*. "The castle was bound to be the setting for the finale, because that was an appropriate thing to do," Ara says of the *Castle Of Illusion* call back. "We wanted to do a water level too, in order to do something different with that environment. I thought setting a level on a pirate ship was also a really great choice, because it had all of these natural elements that we could take advantage of. We were actually supposed to have another world in addition to the ones we developed, but we were too constrained by time."

There was time, however, to design quests for Mickey to fulfil in *Power Of Illusion*, which he was given by the Disney characters he rescued and brought to safety. "That was mainly influenced by a PS1 game called *Suikoden II*, which had a feature where there was a castle, and you rescued people,"

» [3DS] In *Epic Mickey: Power Of Illusion*, Mickey periodically gets sent on quests by non-player characters.

> "WE WANTED TO EMPOWER THE PLAYER BEYOND NORMAL PLATFORMING ABILITIES. THAT WAS WHERE THE WALL-JUMP AND THE GROUND-POUND CAME IN"
> Aj Grand-Scrutton

Ara reveals. "I think the hook was that you could potentially fold them into your party. One of the features was this hub area, and as you rescued them the hub would develop. Those people would move in as residents, and some would offer you various services. So in a very large part the quests in *Power Of Illusion* were inspired and modelled on that."

It seems likely that the positive reviews garnered by *Power Of Illusion* renewed interest in the earlier titles in the series, certainly if the 2013 *Castle Of Illusion* remake that followed was anything to go by. Rather than simply recreating the original with nicer visuals and audio, the remake instead expanded some of its levels, depicted others in 3D and added some new challenges, but in all other respects it was a very faithful adaptation that was very popular.

Despite this, a decade passed before the *Illusion* series continued with Delala Studios' *Disney Illusion Island*. The four-player adventure diverged from its predecessors in one important respect, as Delala creative director Aj Grand-Scrutton recollects. "We sat down as a leadership team, and we said that we knew combat wasn't right, and that we didn't want the game to be aggressive," Aj reasons. "From a story and Mickey standpoint, it made sense that he would have attacks when he was put into the environments of the earlier *Illusion* titles. But in our game, Mickey and friends had turned up on this island, and if they just started attacking its inhabitants it wouldn't feel true to the characters."

But while *Illusion Island*'s adventurers lacked attacks, this was compensated for by the many moves in the game, which ranged from charming to parkour-inspired. "The leapfrog was there because even when the characters got boost jumps people might struggle a little bit with some of the gaps, and leapfrogs were just fun!" Aj beams. "Then we just knew that we wanted to have hugging in the game, it just felt right for those four characters. We also wanted to empower the player beyond normal platforming abilities. That was where the wall-jump and the ground-pound came in. But we wanted those moves to make sense, so when you got them it would open up a part of the world for you."

» [Switch] Rather than finding power-ups, Mickey's team have to earn them in *Disney Illusion Island*.

» [Switch] Instead of attacking their foes in *Disney Illusion Island*, Mickey and friends simply leap over them.

Just as importantly, *Disney Illusion Island* had beautiful visuals to match its superlative gameplay, in keeping with the standards that had been set by *Castle Of Illusion*. "*Illusion Island*'s visual style came from a lot of stuff," Aj ponders. "We looked back at the near 100 years of Mickey, because there was a lot of wonderful stuff going on right back to the *Steamboat Willie* days. We definitely looked at his modern shorts too. I think there was also a heavy influence in there from the approach taken by other modern cartoons that do a really good job of depicting painterly backgrounds and simpler-looking characters. So we wanted to capture the feeling that you were playing a cartoon."

Based on the critical response to *Disney Illusion Island*, Aj and his team achieved their goal of creating a highly playable cartoon in the style of *Castle Of Illusion*. Even now, their inspiration still stands up, as its producer Stephan Butler succinctly concludes. "I still think *Castle Of Illusion* is a milestone game," Stephan considers. "The reviews for it at the time were sensational, and in terms of sales it reached number one in both America and Japan. It's also a game that many older gamers remember fondly."

SAFE
RANK
15
2

F-Zero

A TIMELESS CLASSIC

» SNES » 1990 » NINTENDO EAD

I, like many others, was sucked into the hype of *F-Zero 99* when it dropped without warning at the last Nintendo Direct. While I initially had a lot of fun with the online racer, I ended up pining for the 1990 original. It's not that *F-Zero 99* is a bad game, it's just that it doesn't capture the thrill of high-octane racing like the first game managed to do so well.

Play *F-Zero* on its highest difficulty setting and every inch of ground gained feels like a massive victory. While the AI racers are never unfair, they're relentless in their pursuit of you and simply finishing every lap feels like a small triumph in itself, let alone staying ahead of the rest of the pack.

By comparison, *F-Zero 99* feels more like racing in dodgems, rather than futuristic vehicles. The sheer amount of competitors on the track can make your craft feel like a pinball as it's ricocheted around the circuit by the other players. I'd argue that luck rather than skill plays a large part in how well you do in *F-Zero 99* and that's never a good sign. Don't get me wrong, I do enjoy *F-Zero 99*, but it feels more like a party game, rather than a racing game.

The original *F-Zero* is all about the racing. Its tracks are exquisitely designed and while they start off relatively simple with the ridiculously broad raceways of Mute City 1, tracks like White Land II up the ante considerably with savagely tight U-turns and demanding jumps. You might not be racing against as many vehicles as you do in the later games, but that simply means you have more space to learn the intricacies and secrets of each track.

As enjoyable as *F-Zero 99* is, that enjoyment will be fleeting, as its online-only nature means it will inevitably be replaced by another franchise and lost to the mists of time. The physical nature of my *F-Zero* cart means I should hopefully be able to enjoy it forever.

volition

Retro Gamer looks back at the 30-year history of Volition, one of the games industry's more recognisable developers, to celebrate its creations, honour the team and pour one out for the untimely loss of a beloved studio...

WORDS BY ADAM BARNES

» [PC] *Descent* is beloved for its innovative approach to the FPS genre (and its multiplayer mode), though the freedom did mean a lot of lost players.

Well, all things told, 2023 wasn't a golden year for the games industry. For all the potential future classics that have been released, there's been untold heartbreak. An unprecedented amount, really. Whether you blame the economy and gamers with fewer coins to spare or point the finger at cynical corporate entities, the fact is layoffs and studio closures have been happening on a weekly basis. From massive billion-dollar publishers to smaller indie teams, there have been over 6,000 game industry professionals put out of work this year. And among these closures have been some long-running notable developers, such as Volition Inc which announced in August that the 30-year-old studio with more than 200 employees will be closed. That's a blow that every generation of gamer can understand.

Volition was one of those developers that had proven itself in a number of genres, with some gamers remembering the team for its retro classics like *Descent* and *FreeSpace*, or more modern titles like *Red Faction: Guerrilla* or, perhaps most notable of all, open-world chaos simulator *Saints Row*. But Volition never even began life as Volition. Mike Kulas and Matt Toschlog had been working at Looking Glass Studios at the time, having first met one another at Sublogic where they were working on flight simulators. While at Looking Glass, they'd come up with an idea for an indoor flight simulator that would allow for a full six-degrees of movement around the environment, and the two of them would slowly work on this together.

Eventually it reached a point that they wanted to take it further and so in 1993 Mike and Matt left Looking Glass to found Parallax Software. Initially called *Miner*, their game was a novel use of technology at the time that allowed for a truly 3D environment to be explored freely by the player, at a time when 3D was only just beginning to find its way into games. "I was there at the beginning with John Slagel [programmer]," says Che-Yuan Wang, who worked on Parallax's first game as a designer. "It was a four-person team for months before we hired our first artist, so I was doing some crude art at the beginning as a placeholder. Some of it did end up in the game."

Yuan had interviewed with Mike during one of the open interview days at the University Of Illinois, Urbana-Champaign. At the time Mike had been representing Looking Glass and the two kept in touch, but it wasn't until Parallax formed that Yuan was hired. "On one of my first days on the job, I remember the whiteboard in the small office we were in had a to-do list, with one of the tasks being 'Figure out the name of the company'. To be honest, that was the moment I realised I wasn't working for Looking Glass."

Parallax's first game would go on to be *Descent*, but was at this point known as

» [PC] *FreeSpace* and its sequel were the dream games for lead designer Adam Pletcher, and that carried over to the fanbase who were drawn into its space saga.

» [PC] Volition spent a lot of effort immersing the player into the game. Even its menus were fully animated and highly detailed.

» [PC] *Red Faction*'s destructible terrain allowed for some interesting puzzles and combat solutions, but it also looked cool after the climax of a tough battle.

> "It was a four-person team for months before we hired our first artist, so I was doing some crude art at the beginning as a placeholder"
> **Che-Yuan Wang**

Inferno and shared more in common with *Starfox*, says Yuan. "*Doom* was a huge influence," he explains of how the project shifted during development. "The id guys sent us their alpha early on, and so a lot of the gameplay evolved into a hybrid of fighter jet and *Doom*/FPS game styles." *Descent* was initially signed with Apogee but was later cancelled due to the continued running costs of development, requiring Parallax to "scramble to create a pitch document" to search for a new publisher. Here they found Interplay, which pushed for the game's highly acclaimed multiplayer mode, helped to refine its story and used its publishing expertise to reach over a million sales in its first couple of months after its release in March 1995.

A sequel came only a year after that, which started life as an expansion pack but evolved into a more fully formed release. "Matt [Toschlog] moved up to Ann Arbor, Michigan, to start a new office as *Descent* was finished," explains Adam Pletcher, who was the first artist hired for the studio and one of the longest-running employees at Volition. "Both locations were gonna work on *Descent II*, and I moved up there for about a year and helped him get the office started."

D*escent II* was officially developed by Parallax across those two locations, but as development went on it was clear that there needed to be a more formal split. Matt's team in Ann Arbor became Outrage Entertainment, while Mike's in Champaign, Illinois became Volition. The former started on *Descent III*, meaning Volition needed to get to work on something different. This time around it was Adam leading the charge, "I'd always really liked space combat games," he says. "So when Mike and the Champaign people were thinking about what to do next,

GAMES TO DISCOVER

DESCENT
PC, 1995
■ Under the name of Parallax Software, *Descent* was the team's first release and made a splash in the PC market.

DESCENT II
PC, 1996
■ The sequel brought with it necessary improvements that rounded out the *Descent* package.

DESCENT: FREESPACE – THE GREAT WAR
PC, 1998
■ Volition took the *Descent* series out of the mines and its FPS genre and shifted into a space combat simulator.

FREESPACE 2
PC, 1999
■ Struggles with Interplay meant that despite glowing reviews, the cult favourite *FreeSpace 2* was a commercial flop.

SUMMONER
PLAYSTATION 2, 2000
■ Volition struggled to get this RPG onto the PS2 in time for launch and it shows, but it's still a curio worth playing.

» [PlayStation 2] It might have been a bit rough around the edges, but *Summoner* was a solid action RPG that had a rich and intriguing world behind it.

» [PlayStation 2] The release of *Final Fantasy X* about a year and a half prior to *Summoner 2* had some clear impact on the general design of the sequel.

▶ I submitted this design doc for a space combat game with cherry-picked ideas from the best games of the genre."

Adam moved back to Champaign, where he worked as both the lead artist and the lead designer on the game, which released as *Descent: FreeSpace – The Great War* in 1998 on Windows. A follow up sequel came out in 1999 that dropped the *Descent* tag, making for a duo of space flight combat games that nowadays carry as much nostalgic rep as the *Descent* games. "People liked it for the reasons I wanted to make it," explains Adam. "We spent a lot of time on voice and cinematics and stuff, and I think it just sort of felt like a space saga, where some other games did not."

At this point in the studio's history, Volition was starting to pick up some speed. It had produced two instant classics and was already working on four different projects, including *FreeSpace 2*. The others were *Descent IV*, *Tube Racers* and *Summoner*, but only the latter was actually released. Interplay was struggling at the time, and this had a significant impact on the success of the *FreeSpace* sequel when a mix-up with the marketing had meant very little promotion within retail. This and similar issues with *Descent III* over at Outrage pushed Volition to break away from Interplay, which in turn meant no *Descent IV* (Interplay owned the publishing rights to that series) and the now risky project of *Tube Racers* needing to be cancelled.

The resolution came from THQ, who bought the studio in August 2000 in time for the next era of Volition games. "It definitely felt like more of a business than a studio," says Adam of Volition's growth from the early days of *Descent*. "It wasn't so much a garage project anymore. You know, we had someone at the front desk answering phones. We had an IT person. We were buying actual workstations, building PCs and not just going down to Best Buy and buying stuff." Volition was growing fast, and it had to move regularly to meet the ever changing demands. "I think by the time *FreeSpace* finished," recalls Adam, "we were probably on our fourth space in town. We moved about roughly once a year for many years. Until right around the time we started doing *Saints Row*, and then we moved downtown to the one main building that Mike and a partner of his basically built, more or less, to find a place for us." The first game with THQ was *Summoner*, a launch title for the

GAMES TO DISCOVER

RED FACTION
PLAYSTATION 2, 2001
■ The novelty of its destructible terrain was enough to elevate *Red Faction* in a very crowded genre.

SAINTS ROW
XBOX 360, 2006
■ The game that most gamers would know the name Volition for, a rare '*GTA* clone' that could stand out from that game's shadow.

SAINTS ROW 2
XBOX 360, 2008
■ The *Saint's Row* sequel was Volition's next release and refined the game's design into a more complete and humorous package.

RED FACTION: GUERRILLA
XBOX 360, 2009
■ The series changed a lot with this release, from FPS to TPS, linear to open world, and the Geo-Mod engine focussed on building obliteration.

RED FACTION: ARMAGEDDON
XBOX 360, 2011
■ And yet another shift, taking that highly praised open-world experience and cramming it into a linear underground campaign against aliens.

PS2 and the studio's first RPG. It was the brainchild of Sandeep Shekhar, who was passionate about RPGs and had rallied the studio around the idea of working on an RPG at a time when Volition was looking for its next project, much like how Adam had done with *FreeSpace* and the space combat genre. "It was really a fun time period," says Adam, "because you could really just write up your dream game and you might have a shot at having it made." *Summoner* released alongside the PS2 and, while flawed, met with a decent degree of commercial success thanks to the voracious demand of early PS2 adopters. A sequel came out in 2002 that addressed some of these flaws but the series never amounted to much, leading to the third game in the series being cancelled before it got off the ground.

> "We were going to do a space marine kind of game, but there were so many competitors out there we decided to do something different"
> **Dan Cermak**

Meanwhile, there was *Red Faction*, which had been converted from the *Descent IV* work that Volition had developed prior to its split with Interplay, turning that game's destructible terrain into an FPS that would then go on to become the primary selling point for the entire series. "John Slagel felt like he could pull off what later got called the Geo-Mod system and he spent most of that project working on that feature," explains Adam. "I mean everyone loved it, it definitely led to some really interesting multiplayer stuff. It's just that it was very challenging to design, because when do you allow players to burrow everywhere and break all your puzzles?" *Red Faction* released in 2001 on PS2 and PC with a sequel on the same platforms just a year later, receiving great positivity especially on PS2. The ability to simply smash your way around a locked door was a novel strategy to the genre and offered something different among competition, and it proved Volition had legs for a more typical FPS.

The early acquisition by THQ proved to be a good opportunity for Volition once it started to think about what was next, since it no longer needed to search for paycheques from publishers and could instead grow securely and just focus on making "games that we wanted to play", as Adam puts it. "I think a lot of us old-timers were relieved once the THQ merger happened," adds Adam. And thanks to this stability, Volition had an opportunity to develop what would go on to be its defining title. "We were going to do a space marine kind of game," says Dan Cermak, who had joined as VP of development at Volition in 2003, "but there were so many competitors out there we decided to do something different."

While deciding on what to do next, the team that was going to work on the next project was split into small teams to come up with ▶

» [Xbox 360] The original *Saints Row* still feels like a fresh and interesting addition to the open-world crime genre.

» [Xbox 360] *Saints Row* certainly came out balls swinging with the original, and things only escalated from there with each new release.

A HOME FROM HOME

INSIDE THE VOLITION FAMILY

■ One thing that's interesting about Volition is that many of the developers that worked there, stayed there – definitely something of a rarity in the industry. "It's funny, when there's a thousand studios around and you can bop around, it doesn't mean that much," says Dan Cermak, highlighting how important it was for the studio to feel like a home from home for many of its developers who would move across the country to be there. "We'd go off to Reindeer Ranch every winter and we'd bring all the kids. We'd bring out our keg every two weeks and drink beer and talk about what people were working on. To me it felt like this is the right balance of life."

And because of this, Volition's 200+ employees were a significant contribution to the city of Champaign, Illinois itself. "We were important, they loved us," says Dan. When *Saints Row IV* was shipped, there was even a celebratory '*Saints Row* Day' in the city. "We got a little piece of paper about it from the mayor," he laughs. "They celebrated us and we felt like a partnership. Our presence helped rejuvenate that part of town and we were a really important piece of it."

SAINTS ROW: THE THIRD
XBOX 360, 2011
■ The third iteration of the franchise escalated its zany, over-the-top gameplay and is considered one of the best of the series.

SAINTS ROW IV
XBOX 360, 2013
■ At this point Volition knew what it was doing with *Saints Row,* and this one has the boss of the Saints get elected as President Of The USA.

SAINTS ROW: GAT OUT OF HELL
XBOX ONE, 2015
■ This DLC for *SR4* was met with a positive reception by bringing the series into its unusual setting: Hell.

AGENTS OF MAYHEM
XBOX ONE, 2017
■ Set in the same universe as *Saints Row* and while attempting to do something similar, *Agents Of Mayhem* missed the mark.

SAINTS ROW
PLAYSTATION 5, 2022
■ A reboot of the series arguably made sense, but despite being a high-quality game it failed to meet series' fans expectations.

» [PC] The destruction physics alone made *Red Faction: Guerrilla* a must-play, but it was built into a thoroughly enjoyable open-world campaign, too.

» [PC] The Rockstar title released six months prior to *Saints Row 2*… perhaps that was a reason for the palette shift to a more subdued visual style?

» [PC] *Saints Row: The Third* is easily one of the most compelling and fun open worlds to explore, with a sense of humour that few have matched since.

THE DNA OF VOLITION

HOW THE DEVELOPER STOOD OUT

AN OPEN WORLD

■ While not all of Volition's games have been strictly open-world experiences, not at least until *Saints Row*, they have been foundationally about freedom of movement and exploration ever since the release of *Descent*.

PLAYER CHOICE

■ This was essentially the driving factor behind *Saints Row*'s sandbox gameplay or around *Red Faction*'s destruction-based toolset, but it was important for Volition that its players could express themselves through customisation.

CHARACTER DRIVEN

■ Though Volition didn't fully begin to realise this until the release of *Saints Row*, there has been a strong emphasis on high-quality storytelling. Later it would be the likes of Johnny Gat, Shaundi and Kinzie Kensington that players would remember the most.

potential ideas, and the one that stuck was a gang simulator. "The game was called *Bling Bling* at the time," says Dan, "and we put together a tone video basically saying, 'This is what we think it should be like.' And it was all violent as heck, shooting everything, slaughter everywhere and it was done over the music of NWA's *Fuck Tha Police*." This was the video that Volition used to pitch the game that would go on to be *Saints Row* to THQ, a publisher that was historically known for its licensed wrestling and Nickelodeon games. "It was so funny because as soon as that thing stopped, it was dead silent in the exec room. It was all these CFOs, CEOs, all the top people in the company and the CFO said, 'Is this the kind of game we should be making?' And thank god, Brian Farrell slapped the table and said, 'Yep!'"

> "We dodged a lot of bullets over the years and I feel lucky we got as far as we did, and got to work with some amazing people"
> **Adam Pletcher**

It would be a tough project for Volition, what with the team having to handle a lot of new things for the first time. This was their first open-world game, their first Xbox 360 game and they'd scaled up from 66 people to 150 just to get it done. "We did all of this stuff that was crazy to do one at a time, and we did it all at once," laughs Dan. But it paid off, and it went on to be one of the most recognisable titles in the industry and was consistently the best-selling game in THQ's publishing portfolio. *Saints Row* released exclusively on Xbox 360 in 2006, but the success and consistently expanding, unpredictable craziness of the series would motivate Volition to release a new *Saints Row* title almost every two years since then.

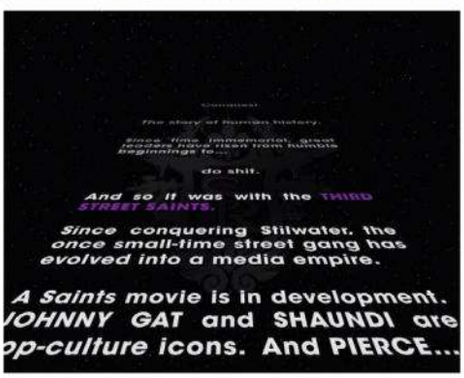
» [PC] Saints Row, released in 2022, was planned as a reboot of the popular series and had a polarising reception.

Despite those successes of the series, however, the truth is that Volition began to face some struggles. The release of *Red Faction: Guerrilla* in 2009 for PS3 and Xbox 360 was met with huge critical praise thanks to its impressive open-world physics-based destruction, but it and its maligned sequel *Armageddon* didn't reach the sales that they arguably deserved. The poor sales of *Guerrilla* would've resulted in layoffs even then had Volition not agreed to turn around a quick sequel – with a controversial decision to switch it into an underground linear style of game. "We kept trying to get back to doing two projects," says Adam. "And we did start several projects that never got completed or we ended up cancelling."

Volition was fortunate to have such an opportunity, explains Adam, which many developers couldn't have survived, but things changed in 2012 when THQ shocked the industry with the declaration of bankruptcy.

Via auctions and sales of THQ assets, Volition became owned by Koch Media, before later ending up at Nordic Games in 2018 which had rebranded itself as THQ Nordic a few years earlier after it had snapped up a large number of THQ's IPs. *Saints Row* could hold the ship steady, but these internally cancelled projects alongside the difficult releases of *Agents Of Mayhem* and a *Saints Row* reboot further exacerbated the struggles for the studio.

So when Embracer Group announced mass restructuring earlier this year, Volition's recent performances couldn't be overlooked. "No studio can survive two hefty-sized-budget games that don't really make money for whatever reason," explains Adam. "We dodged a lot of bullets over the years and I feel lucky we got as far as we did, and got to work with some amazing people." Volition might not have made the games that changed genres or drove new trends, but the games it made were the ones it wanted to make – and that passion always shone through in the quality of its releases. Very few studios can last as long as it did without that drive, nor without the shared support of its employees; it's a loss for the industry that this long-running studio has been closed. "I've only been at three companies," says Dan, "SSI, Westwood and at Volition for 14 years. I was asked to go to corporate and my attitude was, 'I'm not leaving this studio, this is the best place. Best time I ever had in my career, best place I've ever been.'" ✱


do shit.
And so it was with the THIRD STREET SAINTS.
Since conquering Stilwater, the once small-time street gang has evolved into a media empire.
A Saints movie is in development.
JOHNNY GAT and SHAUNDI are pop-culture icons. And PIERCE...

HUMOUR AND SATIRE

■ Volition didn't really begin to incorporate comedy into its games until it took *Saints Row* down a zanier route, but it was one of the crowning achievements of the series that it managed to be crass in a manner of ways without coming across as immature.

BROAD VARIETY

■ Having tackled RPGs, FPS, space combat, open-world shooter and briefly even dabbled with horror, Volition was able to bring its A-game to whatever genre it took on. The *Saints Row* series also became crammed with diversions.

Future Classic

Modern games you'll still be playing in years to come

Info

- **System:** Switch
- **Year:** 2021
- **Publisher:** Aladdin X
- **Developer:** Aladdin X
- **Key People:** Unknown

Go Deeper

- *Suika Game* is the only game to date that Aladdin X has released on home consoles, since game development is not its main business focus.
- The official English title of *Suika Game* briefly changed to *Watermelon Game*, before reverting back to its better-known Japanese title.
- The concept for *Suika Game* can be traced back to a 2021 Chinese browser game called *Synthetic Big Watermelon*.

» [Switch] In the early game, lining up fruits by size is a worthwhile strategy.

The surprise hit of 2023 is a fruity puzzle game that inspires rage and relaxation in equal measure, and came from a totally unexpected source. Here's why so many players are after a big pair of watermelons

Words by Nick Thorpe

SUIKA GAME

THE BACKGROUND

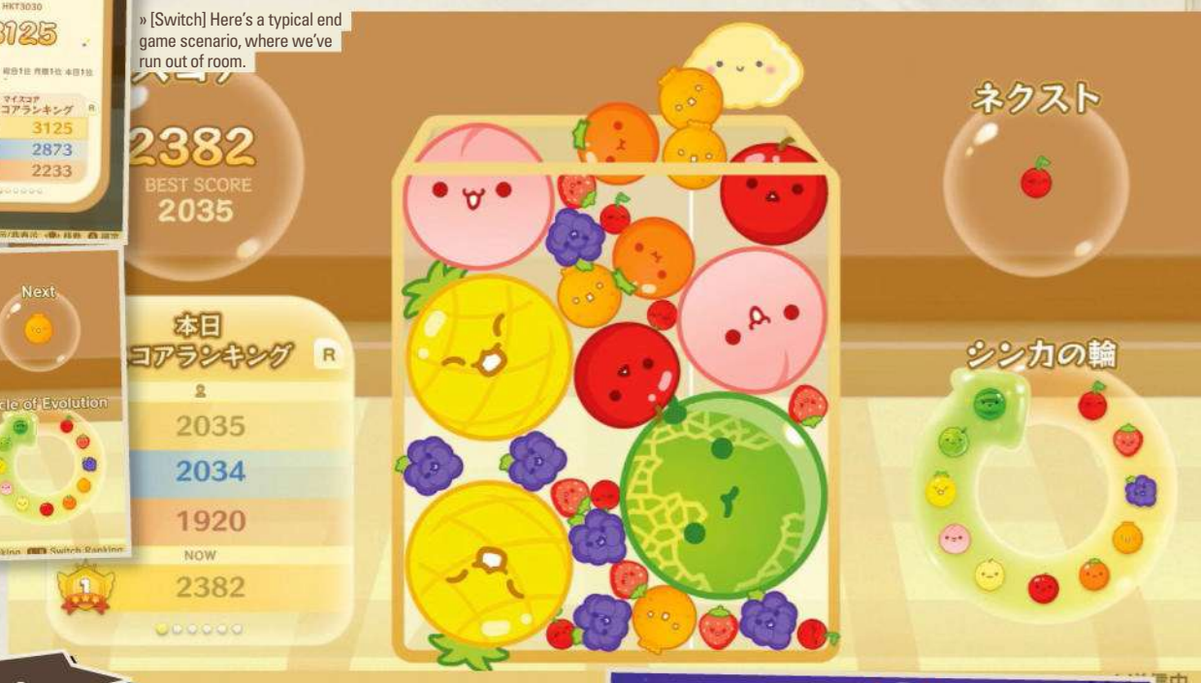
If you visit the website of *Suika Game* developer Aladdin X, you won't see any games on the front page. You'll see tech devices including wireless HDMI connectors and projectors, and that's where this viral hit puzzle game originates – it first surfaced in April 2021 as a built-in game for the company's projectors, and proved popular enough that the company decided that it should be made available elsewhere. The company considered a mobile-phone release, but instead decided to port the game to the Nintendo Switch, for which it launched exclusively in Japan in December of 2021. The game initially didn't gain much in the way of attention, and the crowded nature of the eShop meant that it could have easily faded into obscurity.

That didn't happen. *Suika Game* instead caught on among streamers in 2023, particularly the popular virtual YouTubers of Hololive Production, thanks to memorable moments resulting from its deceptively tricky gameplay. It exploded in popularity from September and by 10 October, roughly one year and ten months after it launched, the game had passed a million sales. Aladdin X has been quick to capitalise, releasing *Suika Game* internationally on 20 October – three days before it passed the two million sales mark, and four days before it gained official English language support.

THE GAME

Suika Game is named after the Japanese word for watermelon, and that's your goal – to make a watermelon. If you've ever played a puzzle game like *Threes* or *2048* in which you need to combine objects of equal values, you'll know what that entails. You drop fruits into a *Tetris*-style well, and if two of the same fruits touch they'll combine into a fruit of the next size up, and you'll score some points. The smallest fruit is a cherry, which is ten steps away from becoming a watermelon, and each fruit you drop is randomly selected from among the five smallest. If you manage to combine two watermelons, both disappear.

» [Switch] You can see the cascade on the right – the cherry we drop will become an orange.



» [Switch] Here's a typical end game scenario, where we've run out of room.

Things of note

BIG VALUE

Of all the reasons behind *Suika Game*'s enormous success, its very low price must be a major contributing factor – it's available for just £2.69 on the Switch eShop.

SPOOKY SEASON

Renewed interest in *Suika Game* prompted Aladdin X to add a Halloween theme in 2023, featuring new background graphics and music and a pumpkin replacing the watermelon.

PLENTY OF POINTS

The global high score at the time of writing is 7,267. Before the October 2023 rankings reset, the top score was 7,355. You can watch that particular run here: youtu.be/XVDGTelB65o

SALTY STREAMERS

If you want a look at the action that made *Suika Game* such a viral hit, this compilation of virtual YouTubers losing the game should suffice: youtu.be/f_Su4K3RvX8

COPIOUS CLONES

As you'd expect from such a simple idea, plenty of mobile-game developers have already cloned the game – though naturally, the physics and presentation aren't quite right.

Of course, that's easier said than done. *Suika Game* gives you unlimited time to drop a fruit, but the lack of time pressure is replaced by space pressure. In *2048*, any value of block takes up one space in the grid, but in *Suika Game* each fruit is progressively larger than the last. That means that you'll be working with diminishing space as the game goes on – but since the next fruit up is usually smaller than two of the previous level, you'll frequently build up a large pile, clear it down and then get to work again.

That's not the only struggle to contend with. All of the fruits in *Suika Game* have physics, and can roll around, shift and bounce. Sometimes, especially in the early game, you'll use one fruit to knock another one, sending it rolling towards an inevitable combination. Later on, you might drop one fruit on top of two that are *almost* touching in order to force them together. At the highest level you can use this to mix up the order of your fruits, dropping one in a higher location and then dropping the next where it will eventually land, in order for it to end up underneath the first fruit.

It's the physics that make the game so deceptively tricky. Many a player will lose their mind when a stray cherry sneaks between two larger fruits to block a combination, but that's nothing compared to the pop when the fruits combine. This effect is small at low levels, but larger fruits can fling nearby fruits in all directions – including up and out of the well, causing an instant game over. The trick is to avoid ending up with fruits on top of ones you're hoping to combine, but success is never quite guaranteed.

There's only one game mode, but *Suika Game* does keep track of daily, monthly and all-time high scores – both personally and globally via the Nintendo Switch Online leaderboards.

» [Switch] This is a scenario you want to avoid – small fruit blocking two large fruits from touching.

With plenty of depth to the gameplay and that crucial one-more-go factor, you'll spend weeks and months coming back and trying to top your own personal best, in search of that elusive double watermelon.

WHY IT'S A FUTURE CLASSIC

The timeless appeal of a good block-dropping puzzle game has been proven by the likes of *Tetris* and *Puyo Puyo*, and *Suika Game* is the first novel take on that formula to gain significant interest in many years. We've already seen friends and relatives fall for its charm, including those who rarely touch games – the cute fruit graphics are appealing to players of all ages, and the relaxed background music loop is the kind of tune you'll find yourself absent-mindedly humming both while playing the game and for days afterwards. So if you're not playing the original *Suika Game* in years to come, we'd bet you'll at least be playing an updated sequel.

THE MAKING OF SPIDER-MAN

IN THE KNOW

- **PUBLISHER:** ACTIVISION
- **DEVELOPER:** NEVERSOFT
- **RELEASED:** 2000
- **PLATFORM:** PLAYSTATION, VARIOUS
- **GENRE:** ACTION

SPIDER-MAN HAS BEEN AROUND FOREVER. CREATED BACK IN 1962 BY STEVE DITKO AND STAN LEE, HE HAS SINCE BEEN FRONT AND CENTRE OF THOUSANDS OF ADVENTURES, THROUGH ALL TIMES, DIMENSIONS, MULTIVERSES – AND VIDEOGAMES. LET'S SWING BY AND TAKE A LOOK AT THE ICONIC SUPERHERO'S FIRST 3D ADVENTURE

WORDS BY PAUL KAUTZ

» Chad Findley was the lead designer of *Spider-Man*, and part of many other Neversoft games. He switched to Activision in 2014, working on the *Call Of Duty* series amongst other games, and took a sabbatical in 2017. Since 2020 he works as a freelance game designer, and creates impressive transforming arcade cabinets in his free time. For an example of that, check out youtu.be/xE24md69L2c

DEVELOPER HIGHLIGHTS

APOCALYPSE
RELEASED: 1998
PLATFORM: PLAYSTATION

TONY HAWK'S PRO SKATER (PICTURED)
RELEASED: 1999
PLATFORM: PLAYSTATION

GUITAR HERO III: LEGENDS OF ROCK
RELEASED: 2007
PLATFORM: PS3, VARIOUS

» [PlayStation] Over the course of the adventure you will traverse New York City, the Daily Bugle offices, sewers, a subway station, and an evil underwater lair. Your trusty Spidey compass always points you in the right direction.

The story of *Spider-Man* began at the end of 1998, at the small Californian company Neversoft. "We had started work on a prototype for an official *Star Trek: Voyager* game," Neversoft veteran and *Spider-Man* lead designer Chad Findley tells us. "We had Seven Of Nine move around the corridors of the ship and shoot a phaser rifle. That was already a lot of fun – but after my boss heard that Activision had the *Spider-Man* licence, he pushed hard for us to get it!"

Activision's condition for granting the licence was that a 3D game had to be made with it – and since Neversoft had a powerful 3D engine available, all parties came to a quick agreement. However, according to Chad, work on the actual game design did not begin until May 1999. The reason for this was that the 3D system, which came from the development of the action title *Apocalypse* (featuring Bruce Willis) and had already been overhauled for use in *Tony Hawk's Skateboarding*, suddenly had to cope with very different uses. "The good thing was having a running engine base with a great animation system and no spaghetti code," continues Chad. "Still, there were a lot of difficult parts: a completely different control system, no trigger or AI systems, no fighting core, no cutscene code, no streaming or expansive areas – and of course: no swinging and wall-crawling. This was super challenging to go from nothing to a shippable quality." All of that had to be written from scratch by main programmer Dave Cowling, which took about six months, after which the actual game design could finally take shape.

So what is Neversoft's game about anyway? The short version: Doc Ock is at it again! Venom also comes into play, which is never good news – and on top of that, the streets of New York are flooded with a mysterious green mist. But it's not the fairly benign story that keeps you hooked, it's the game. After all, this is Spider-Man's first 3D game, and it's impossible to overstate what a big thing that was at the time. All Spidey games up until then were strictly two-dimensional – so one of the most flexible superheroes was limited to sideways movements. And then Neversoft came along and finally gave him the degree of freedom he always deserved. Which of course sounds much easier than it actually was.

> "WEB SWINGING WAS VERY COMPLICATED, AS IT HAD NEVER BEEN DONE BEFORE IN 3D"
> CHAD FINDLEY

"Web swinging was very complicated, as it had never been done before in 3D," explains Chad. "Should it be physics-based? Does Spidey need to target ceiling points to swing from? How does the game know where the player wants to swing? It took months of iterations to get to a system that was fun and didn't feel weird or magical or just got it wrong a lot," he continues. "Wall-crawling required us to make two different sets of polygon flags to change Spidey's crawl mode – a large area flag for the faster, wider stances and then a small area flag which triggered a different set of animations to crawl around tight spaces. Even with that, it was difficult for the artists and designers to build architectural elements that were realistic and interesting, but still crawlable."

» [PlayStation] The first 3D *Spider-Man* game had to compromise: you are not allowed to swing freely through the streets.

» [PlayStation] You can unlock ten costumes in *Spider-Man* that will either help you or make the game more difficult.

A CRUNCHY CONVERSION

HOW THE PC VERSION OF SPIDER-MAN ENDED UP IN A CEREAL BOWL

The version of *Spider-Man* for PC, returned to the same platform a year later – but only in the USA, and only if you were prepared to eat a lot of sugar! As part of the marketing campaign for the 2002 *Spider-Man* film starring Tobey Maguire, Sony Pictures, Activision, Kellogg's and America's Dairy Farmers and Milk Processors cooperated on a special promotion. If you collected and sent in coupons from special cereal boxes ("the limited edition cereal is low fat, provides 11 essential vitamins and minerals, and is an important part of a balanced breakfast") and two gallons of milk, you received a CD promising a "PC Game" and "Bonus Movie Materials".

The bonus materials contained a lot of information from the film, which was in final production at the time, and the accompanying game by Treyarch. But not a demo of that game – instead you got a modified version of the Neversoft game, featuring the Spidey costume from the movie as well as different billboards, promoting the film and the Got Milk? campaign. Also, the CD did not contain the full game, but only a demo that ended after the fight against Rhino – followed by a text page advertising the upcoming Treyarch game, which had nothing to do with the one you had just finished.

The original design team had nothing to do with any of this, "I was surprised to see it," Chad recalls about this strange version. "I'm sure there was a call made at the Activision executive level that never made it down to the Neversoft rank and file."

EXCITING SUPER-HERO OFFERS
from Kellogg's &
SPIDER-MAN
SWING INTO 3-D ACTION!
FREE
CD-ROM
got milk?
Use your wall-crawling and web-slinging abilities to capture notorious villains.
The Spider-Man™ CD-ROM features:
• Up to 12 levels of play
• Movie footage
• Website links
In Mail with Proofs-of-Purchase from 2 KELLOGG'S Products and 2 Gallons of Milk
GO FOR THE ULTIMATE SPIN AT www.sony.com/Spider-Man

» [PlayStation] The fighting system is simple but powerful. You can even add web enhancements to your attacks.

» [PlayStation] The pre-rendered cutscenes are low-res and quite blocky, but do a nice job of conveying *Spider-Man*'s plot.

» [PlayStation] You can pick up parts of the environment (like flower tubs, tables or copy machines) and use it against your enemies – something that you don't get to do very often.

» [Playstation] Most boss fights are not solved by continuous punching and kicking, but are designed like adventure puzzles. Carnage for example can't be beaten and has to be tricked into a sonic trap.

» [PlayStation] Monster-Ock was created specifically for the game. You can't fight this abomination, only escape it!

WHAT IF THERE WAS A WHAT IF...? MODE?

THE ULTIMATE FAN SERVICE

Entering GBHSRSPM into Spider-Man's cheat menu activates the What If...? mode – and modifies a ton of things about the game. The overall design remains the same, but many details change – sometimes slightly, other times into something completely crazy – The chimneys spewing out the green mist are no longer simply closed, but blocked with gigantic bananas. The Symbiote-infested warehouse hides a very Indiana Jones-y Ark Of The Covenant. Doc Ock's underwater tunnel features a very yellow submarine. And Black Cat is trapped in the party zone, dancing non-stop while talking to Spider-Man. Also you will have additional encounters with your superhero pals. In the normal game you meet the likes of Black Cat, Daredevil and Captain America – and in the What if…? version there are also familiar characters like the Silver Surfer, Ghost Rider and the Sub-Mariner.

These are just a few examples of the many small and big changes that the What if…? mode brings – and it's worth playing through the whole game again just to find them all. "The What If…? mode came about because I loved a ton of the Marvel characters and wanted to include them somehow," Chad tells us. "So we made the list of characters we wanted to appear in some way – and we got approval for all of them. So we devised the What If…? mode, so we could shove them in. And the result… well, we had a lot of late nights and got kinda loopy sometimes. Oh, and this mode includes J Jonah Jameson being replaced by a model of our boss, Joel Jewett."

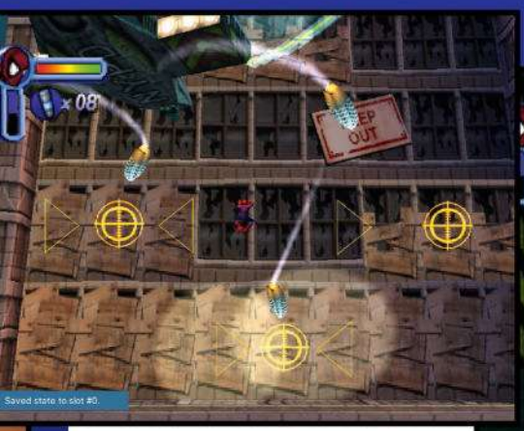
The third problem were *Spider-Man*'s outdoor levels. They were nothing new in 2000 – even *Doom* offered 3D action under an open sky in 1993, while the 1998 games *Unreal*, *Half-Life* and *The Legend Of Zelda: Ocarina Of Time*, expanded this further by offering extensive landscapes. But none of them came with a swinging mechanic and a hero able to cling to any 3D building. In *Spider-Man*, an additional problem was that Spidey prefers to swing through New York City – which features many tall buildings and crowded streets. Something that 2000's technology couldn't even begin to properly represent, as Chad explains. "Outdoor levels were difficult for a couple of reasons," he says. "With outdoor city levels there come a lot of expectations, like pedestrians, vehicles and an expansive location where you can swing anywhere. We could do neither of these given the engine and time constraints. That was why we decided to add the fog to Doc Ock's evil plan – so we could obscure the living city and only have specific buildings to swing to." [Clever – Ed]

In any case, you have to deal with a lot of enemies that you can punch, kick or tie up with various web attacks – the combat system is easy to handle, but does not offer too much depth. Which is also true for most of Spider-Man's enemies, as the standard mercenaries or mutants usually fall after just one combo. The Symbiotes you have to deal with in the back half of the game offer a bit more of a challenge – but as soon as you find the fire upgrade for your spider web, even these guys drop like flies. And there aren't many more than these examples in the whole game – just about a handful of different enemies waiting for their well-deserved thrashing. According to Chad, the main reason for this was a lack of time. "We had to prioritise work within a tight timeline – and for Spidey I wanted to focus on the bosses instead of more random thugs."

> "MARVEL KNEW WE WERE AVID FANS AND WOULDN'T DO ANYTHING BAD – SO WE GOT PRETTY MUCH EVERYTHING WE ASKED FOR. IT WAS GREAT"
> CHAD FINDLEY

Speaking of bosses: of course you'll know Scorpion, Rhino, Venom and Mysterio. The final beast, however, is new. Monster Ock, a terrifying hybrid of Doctor Octopus and Carnage, was created specifically for Neversoft's game. He poses a very interesting challenge, as you cannot fight him – all you can do is escape from him. According to Chad, Marvel was surprisingly chill about all of that. "Marvel was super cool during the entire process. They did not have anything close to the review processes all large franchises have these days. I think they knew I was an avid fan and wouldn't do anything bad – so we got pretty much everything we asked for. It was great."

As a result, Neversoft's game is bursting with fan service. In the very first level you find the Baxter Building, the headquarters of the Fantastic Four. A poster advertises interviews with Captain America and Wolverine and you can pick up 32 covers of classic *Spider-Man* comics hidden throughout the game, which you then can view in a separate menu. Also there are ten collectable costumes, which give you additional powers. The



» [PlayStation] Early in the game, Spider-Man gets chased by helicopters – which destroy half of New York City hunting one superhero.

» [PlayStation] Keep your eyes peeled for comic covers hidden throughout the game: there's 32 of them, and collecting all of them nets you the Spider-Man 2099 costume.

Spider-Man 2099 outfit, for example, allows you to inflict double damage. The Captain Universe costume makes Spider-Man invulnerable – but to get this, you have to finish the game on the hard difficulty level first. There are also a few rags that bring additional challenge. The Amazing Bag Man costume, for example, looks wonderfully silly, as it is just a pair of blue pyjamas with a paper bag over the head – but by wearing it, you are limited to a maximum of two net cartridges at a time, making the game much more difficult. The ultimate fan service, however, is clearly the What If…? mode (see What If There Was A What If…? mode? for more information).

From a technical point of view, Spider-Man was not exactly amazing – the original PlayStation was six years old at that time, its successor already available. What Neversoft delivered was still good, if a bit outdated. Spider-Man himself looks the best: nicely designed and easily recognisable – after all, he consists of about 350 polygons, making him by far the most detailed character in the whole game. The rest shows much less fidelity and is filled with a lot of recycling, which is best seen in the only two women in the whole game: Black Cat and Mary Jane Watson are identical, differing only in their clothing textures and hair. Oh, and they are also both voiced by the same person, Canadian actress Jennifer Hale.

Speaking of which, the game's voice-over is really something else! Most of the voice actors from the Nineties series and the later spin-off *Spider-Man Unlimited* were gathered to reprise their familiar roles. The big highlight is clearly *Spider-Man* creator Stan Lee, who not only introduces the levels, but also has a lot to say about the bonus materials. Chad was responsible for all the voice recordings and has only good things to say about working with Stan. "I voice-directed him, and Stan Lee really knew what we were looking for. He came in and just knocked it out like a pro. From what I remember, we got it done in a day. That was one of my favourite times voice-directing someone."

The gaming press of the time appreciated the effort. Eurogamer gave it a 9/10, as did IGN and the *Official UK Playstation Magazine* in its 62nd issue – where reviewer Dan Mayers said, "*Spider-Man* really is a monumental achievement by Neversoft. This is an ace game that proves Peter Parker really is the King Of The Swingers."

Neversoft's game also sold very well. "I can't remember for sure – I think it was a few million, which was pretty good back then," Chad tells us. *Spider-Man*'s massive success on Sony's console meant that it was soon converted to various contemporary platforms (see Conversion Capers). Surprisingly, however, there was never a port to PlayStation 2 or Microsoft's Xbox. According to Chad, this was because Neversoft focussed on the next-gen continuation of the *Tony Hawk's* saga, "*Tony Hawk's Pro Skater 3* was going to be moving up to the next generation platforms, which required an all-company effort." Still, *Spider-Man 2: Enter Electro* came out a year after the original (created by Vicarious Visions, for the first PlayStation only), and was basically more of the same, but nevertheless still a really nice game.

Playing *Spider-Man* today, you quickly realise that a 23-year-old product of course cannot compete with its modern rivals. It was the first 3D game to feature the web-slinger, and as such couldn't avoid stumbling here and there. But if you come to terms with these pioneering problems, you're still looking at a genuinely entertaining game, which has interesting level design, a lot of Spidey flair, many smart ideas – and above all, a ton of fan service. It is obvious that this was a product of love from true *Spider-Man* believers.

CONVERSION CAPERS

THE ITSY BITSY SPIDER WENT UP SOME OTHER SYSTEMS

Nintendo 64

Three months after the PlayStation release, Spider-Man made his way onto the N64, courtesy of Edge Of Reality. The game remained very much the same, but due to the limited cartridge space, all cutscenes had to be presented as comic-panelled still pictures – which actually fits them very well. The biggest disadvantage of this version, however, is the complete lack of the What If…? mode.

Dreamcast

Treyarch was responsible for bringing Spidey to the Sega system in April 2001 (the UK release followed in June) – and this version is generally considered to be the best of them all. It has high-resolution, bilinear-filtered graphics with added effects, completely devoid of any slowdown, all of the contents and perfect controls – catch this version in your web as quickly as you can!

PC

This version was developed by LTI Gray Matter and swung onto Windows PCs at the end of 2001. The game is 100% identical to the PlayStation original, but offers more detailed 3D models, higher resolutions and support of 3D accelerator cards – also it was the basis for a weird 2002 re-release (see A Crunchy Conversion).

Hardware Heaven

Game Boy Advance SP fact

■ Over 30 official colour schemes for the Game Boy Advance SP exist, including special editions celebrating *The Legend Of Zelda*, *Pokémon*, *Kingdom Hearts* and *Spongebob Squarepants*.

PROCESSOR: 32-BIT ARM7 CPU (16.8 MHZ)

RAM: 256KB MAIN MEMORY, 96+32KB GRAPHICS MEMORY

GRAPHICS: 240X160 RESOLUTION, UP TO 512 COLOURS ON SCREEN FROM A 32,768 COLOUR PALETTE, 128 SPRITES PER FRAME, HARDWARE SCALING AND ROTATION EFFECTS

AUDIO: TWO 8-BIT DAC, TWO SQUARE WAVE CHANNELS, WAVE CHANNEL, NOISE CHANNEL

POWER: RECHARGEABLE LITHIUM ION BATTERY (10 HOUR LIFESPAN)

MEDIA: ROM CARTRIDGE (UP TO 256 MEGABIT)

BACKWARDS COMPATIBILITY: GAME BOY, GAME BOY COLOR

Game Boy Advance SP

» **MANUFACTURER:** Nintendo » **YEAR:** 2003
» **COST:** £89.99 (launch), £50+ (today, boxed), £35+ (today, unboxed)

Though the original Game Boy Advance was hardly a failure, an updated version was unleashed less than two years after it launched – and it's arguably the most radical makeover any Nintendo console has ever received. The Game Boy Advance SP features a new clamshell form factor, restoring the vertical orientation of the original Game Boy line when unfolded. The addition of front lighting for the LCD screen corrected the biggest flaw of the original model, while the inclusion of a rechargeable battery was a welcome step forward. Users wishing to use headphones required an adapter, as the system doesn't include a standard 3.5mm jack.

Though Nintendo released the Game Boy Micro in September 2005, it chose to market the Game Boy Advance SP in an upgraded form, with a new backlit screen. These newer models are distinguished by the AGS-101 model number. The Game Boy Advance SP was a massive success for Nintendo during its relatively brief lifespan, with 43.57 million units making their way into the hands of eager players – 53.5% of all Game Boy Advance systems sold. *

ESSENTIAL GAME

Castlevania

The Game Boy Advance hosted an excellent trilogy in Konami's vampire-slaying series, but this first instalment had one major problem – it was too dark for the screen of the original model, with some players even braving the outside world in the hope that real sunlight would help them to see the action. Fortunately for those of us who enjoy the nocturnal lifestyle, the Game Boy Advance SP renders such drastic measures unnecessary with its front-lit screen. No, we're not vampires, we just hate the sun – please put that stake down.

PAUL CUISSET

Programmer and game designer Paul Cuisset tells us about a career punctuated with videogame masterpieces, discusses his most recent project, Flashback 2, and shares his feelings about the industry, now and then

Words by Guy Miquel-Albert

Phuoc-Qui Cuisset, better known under the French name of Paul Cuisset, is considered a programming genius by his associates and friends. In the Eighties he coded his first game, *Phoenix*, when he was studying computer sciences. From 1988, he was the director at Delphine Software International, a videogame studio belonging to the Delphine group. Delphine Software delivered many successful releases but the group went bankrupt in 2004. Paul then created another studio, VectorCell, and developed a new version of his most acknowledged creation, *Flashback* in 2013. His latest project is also related to the iconic 1992 videogame, offering to revisit the initial background, implementing 3D features in a 2D-style game.

» [Atari ST] *Space Harrier* on Atari ST is rather impressive, considering no source code was provided to port the game.

Hi Paul, which childhood experiences influenced your creativity as a grown-up?
The major factor was reading. As a science-fiction enthusiast I read a few classics and anything related to technology has always interested me. I also enjoyed Eighties films, coming with new incredible special effects: *Blade Runner*, *2001: A Space Odyssey* and *The Terminator* are masterpieces. Also *Star Wars*. These films were offering incredible backgrounds. Computers were fascinating: when the ZX81 was released I realised from watching advertisements how extraordinary it was to be able to possess a small computer at home. At the time, computers were sort of a myth: a huge machine in a refrigerated building with many people around wearing white coats. Knowing that it was possible to have the same thing at home triggered something in my mind.

What was your initial contact with videogames back then?
It was in college. I was studying computer sciences on mainframes, very big IT systems [like the] IBM 360. Imagine old-time computers again, with huge boards and white coats running around! In the student club there were a few Apple computers you could play videogames with – small text-based adventure games, or action games, like *Lady Tut*.

A big early game for you was your port of *Space Harrier* to the Atari ST, but you hadn't been provided with assets or source code. How did you develop this game adaptation?
We coped on our own! The father of Michaël Sportouch, our graphic designer, owned a small camcorder. We used to go to the Champs Elysées' arcade in Paris to shoot the game, hiding. Once, the arcade's boss caught us and expelled us. He did not understand what we were trying to do and thought we were competition. We were much more discreet the following times. We had to spend a lot of coins since we needed to record all the game's levels. We jotted down notes about all the enemy waves, and then reproduced the video recordings through code.

It sounds like a lot of work…
It was very good training requiring a substantial amount of work. We learned so much, all the more as it was Yu Suzuki's works we had to study and reproduce. We had only developed a *Breakout*-style type of game before, *Tonic Tile*. It was very exciting for the three young people we were back then, a dream. When they chose our team we could hardly believe it.

Was it usual at the time to port arcade games to micro computers without any of the original assets?
I think it was like this at the time. Developers in charge of developing ports to C64 or ZX Spectrum were not [always] given any assets. Sega would never have provided us with the source code anyway. Small companies signed these kinds of contracts. Elite Systems owned the rights for Europe and we had to cope on our own to adapt the game. Contracts were not as large as they are nowadays.

What was your inspiration when you developed *Bio Challenge*?
We already developed a *Breakout*-style videogame, from which you can find some elements. As a programmer, it had been a real technical challenge since *Bio Challenge* had to run at maximum speed, using some demo makers' tricks. We were using more than 16

> When I imagined a videogame I thought about it as a direct clash between me and the player
>
> Paul Cuisset

SELECTED TIMELINE

- **PHOENIX** [1987] ATARI ST
- **TONIC TILE** [1987] ATARI ST
- **SPACE HARRIER** [1988] ATARI ST
- **BIO CHALLENGE** [1988] ATARI ST
- **FUTURE WARS** [1989] ATARI ST, AMIGA
- **OPERATION STEALTH** [1990] ATARI ST, AMIGA
- **CRUISE FOR A CORPSE** [1991] ATARI ST, AMIGA
- **FLASHBACK** [1992] AMIGA, VARIOUS
- **SHAQ FU** [1994] VARIOUS
- **FADE TO BLACK** [1995] PLAYSTATION, PC
- **MOTO RACER** [1997] PLAYSTATION, PC
- **DARKSTONE** [1999] PLAYSTATION, PC
- **MISTER SLIME** [2008] NINTENDO DS
- **AMY** [2012] PLAYSTATION 3, XBOX 360
- **FLASHBACK** [2013] PLAYSTATION 3, XBOX 360
- **FLASHBACK 2** [2023] PLAYSTATION 4, VARIOUS

» [Amiga] *Future Wars* offers beautiful graphics created by Eric Chahi, the game designer of *Another World*.

» [Amiga] Omnipresent humour is one of Delphine Software's point-and-click adventure games trademarks.

» [SNES] Delphine Software's one and only VS fighting game *Shaq Fu* features the basketball star Shaquille O'Neal.

» [Amiga] There's no rest for inspector Raoul Dusentier on this cruise on the Karaboudjan.

colours, and that was above the Atari ST's limits. The colour palettes had to be changed in real-time. Denis Mercier, the graphic designer, imagined the jumping concept to drop down platforms and kill monsters. At the time, level design and game design did not exist, technical point of view and gameplay were intertwined.

So developers had to be a one-man band and be involved in every aspect of their games?
Absolutely. We didn't have much financial resources anyways, so we had to do everything on our own to reduce costs.

The difficulty in Delphine Software's games was quite high. Was it the spirit of the times or specific game design choices?
It was really the spirit of the times. There were not so many games on the market and you could spend more time on one specific title. We wanted to make the games last as long as possible. I wouldn't say we willingly did it artificially. We were just used to challenging games.

Such as?
I remember having drawn a map on a notebook playing *Dungeon Master* for example. I also believe most people playing videogames at the time were not casual or mainstream gamers. But sometimes the challenge was implemented in an awkward way, since the required testing resources were not as plentiful as today. When I imagined a videogame I thought about it as a direct clash between me and the player. We were happy to give them a hard time, and also knew that after overcoming a challenge, the reward would be proportional to its difficulty. We were not concerned about the markets and were developing videogames for ourselves. We were lucky enough to meet some success in sales but we were not trying to reach a wide audience.

Why did you decide to create point-and-click videogames? Did you feel the urge to develop extended narrative aspects for your games?
I have always loved telling stories. I am a compulsive reader and I think narrative aspects are essential. At some point I felt the need to create something with more structure, characters and a plot. Arcade games were interesting to me on a technical point of view, but less so as a player. I discovered adventure games with Sierra Online: *King's Quest*, *Space Quest*. These were text-based adventure games where you had to type keywords, such as "examine this object", or "go to this place". The Atari ST was provided with a mouse, which was not necessarily the case of PCs. I knew all Atari ST users possessed a mouse, and this gave me the idea to create a point-and-click interface. You could give directions just by left-clicking on the right spot and choose keywords by right-clicking. It started with the same purpose but with the idea of simplifying Sierra's system. We chose to implement five possible actions and object combinations. This simplification led to the games we developed at Delphine Software.

Is there a French touch in the Eighties' era of the videogames industry?
This is a very hard question ! I believe all French developers reject this designation. At the time we didn't like being related to it because it was describing a specific type of adventure game. There has necessarily been an influence and a specific genre associated with our culture: maybe we insisted on the storytelling and artistic aspects at the expense of the gameplay, sadly. [Laughs] At the time the English developers had a great feeling with action games when we were more focussed on narrative aspects. I don't really know if there was a French touch, but we influenced each other because we all worked more or less together. We necessarily impregnated each other, coming from the same society, same culture, same environment. We were all in touch with each other, and maybe this created this specificity.

» [Mega Drive] A classic from Eighties science fiction: Conrad has to survive a deadly TV show.

» [PlayStation] A green target follows *Fade To Black*'s Conrad when he is in the presence of enemies.

> "We didn't care about the market, our concern was focussed primarily on whether our game was fun to play or not"
> Paul Cuisset

***Flashback* was originally going to be a game based on *The Godfather* series. How did you eventually end up developing Conrad's adventures as we know them?**
We were planning on developing *The Godfather* in the future, as I was suggested to do, implying mafia organisations and corporations. Conrad was a Corleone. We started creating the background and reached a result that was quite far from the original licence. One year later, they were quite shocked when we introduced the game to them, and they said it would not be possible to sell the title as a *The Godfather* videogame. [Laughs] On the other hand they reckoned the game was quite impressive and decided to sell it as an original title. Then I modified the story to take as much distance as possible from *The Godfather*.

You also said "no" to MGM as it wanted you to make *Fade To Black* a *James Bond* title. That wouldn't really happen nowadays.
At the time, videogame companies were often managed by programmers who enjoyed playing games. It was very different. Geoff Brown from US Gold was open-minded enough to publish *Flashback*. As a CEO he could make decisions very quickly. There was no need to gather a lot of people, a whole council to make a decision. We just shook hands! [Laughs] I remember having worked with Interplay on *Future Wars*. Brian Fargo came visiting us in Paris, we went to the restaurant and signed right after. Budgets were also much lower. It was much easier, choices were made with your heart.

What were the main challenges to take up in order to implement 3D during *Fade To Black*'s development?
We had to face many technological constraints. A full polygon engine was hard to imagine. Eventually, we remained quite limited on this project. The latter started way before the first PlayStation was released, using a networked polygonal engine. We were using PC software, less powerful and not really designed to create 3D games. The whole engine was programmed as software and we decided to use a raycast system, more or less like *Doom* did, to create the levels.

How did that turn out?
The result was we were quite limited in terms of game design, which made me feel frustrated, since the first *Flashback* was a platformer where you could jump. Our engine required 'flat' levels where you couldn't jump at all. We also had to find out and create all the rules about the use of an in-game camera. These rules were discovered later on by the industry, and I believe we were the first to use a shoulder camera – you take out your gun and the camera closes up and places itself on your shoulder. We had to solve many issues since it was our first 3D game, and there weren't many other examples already released by the industry. It has [often] been a beautiful adventure, but quite complicated.

Toby Gard, *Tomb Raider*'s designer, used the third-person camera mode created for *Fade To Black*, and improved it. Do you have any regrets about not applying for a patent?
At the time nobody used to apply for software patents so I never thought about it. But I ▶

FIVE TO PLAY

Here are some of the most interesting games Paul has worked on

FUTURE WARS

■ Released in 1989, this was Paul's first attempt in the adventure game genre. It has an excellent science-fiction background, a good dose of humour and beautiful art by Eric Chahi. Facing an alien threat, the main character has to travel through time to deactivate bombs.

CRUISE FOR A CORPSE

■ *Cruise For A Corpse* saw Delphine Software use a new context-sensitive evolution of its point-and-click interface. It's a game where Raoul Dusentier, a police inspector, has to investigate the death of the owner of a boat.

FLASHBACK

■ The hit action platformer uses rotoscoping animation like *Price Of Persia*. As a Galaxia Bureau Of Intelligence agent, Conrad B Hart has to collect pieces of his past on planet Titan, whilst fighting the Morphs - shapeshifting aliens that are infiltrating Earth.

MOTO RACER

■ This is a pure arcade racing game that reached critical acclaim and a wide commercial success. It features memorable tracks like riding a motocross bike on China's Great Wall and offers a great sense of speed. It's great fun in both its single and multiplayer modes.

MISTER SLIME

■ This interesting effort makes good use of the DS' hardware. Use your stylus to stretch a four-armed slime through 2D levels to reach dots and move around. The ability to face varied opponents and situations helps make this a rather underrated DS gem.

THE EVERCADE CONNECTION

Discover classic Cuisset on the popular retro systems

■ No less than three games designed by Paul Cuisset – *Flashback*, *Future Wars* and *Operation Stealth* – are available on Blaze's Evercade systems via the *Delphine Software Cinematique Collection 1* cartridge along with *Another World*. The compilation is stamped Amiga, but clearly specifies using the Mega Drive version of *Flashback*. It's Paul's favourite version, since, according to him, "The game was clearly originally designed to take into account Sega's controller and the Mega Drive's hardware technical constraints."

No noticeable issues with the VS controller or the EXP's d-pad were observed, and moving the mouse pointer is easy and precise enough, especially on the VS. When it comes to *Future Wars*, it is sometimes quite hard to be precise in pointing to a location and moving the character due to the screen size when played on the EXP. *Future Wars* always needs its main character to be at a very precise location to interact with his environment. The two point-and-click games remain really enjoyable on the go, nonetheless. But some objects to interact with are sometimes a few pixels tall and almost invisible on the screen. These noticeable points were also inherent to the Amiga and Atari ST versions, even with the use of a mouse, meaning the original works are fully respected.

Last, but not least, the Evercade save states feature is extremely helpful considering the high challenge these games require. Concerning *Flashback*, for instance, this compilation offers save states anytime when even the Nintendo Switch *Flashback* 25th anniversary edition did not. In that, you could only rewind the game up to a brief moment whenever Conrad passes away. Save states allow anybody, newcomer or old Delphine Software fan alike, to enjoy *Flashback* in the most comfortable conditions and revisit this classic.

This collection is absolutely essential and gathers true videogame jewels on Blaze's systems. Alongside the now usual cartridge booklet comes a nice *Another World* poster and a few *Future Wars* concept artworks. Another collection offering on the go playability for *Cruise For A Corpse*, *Fade To Black* and *Moto Racer*, among other titles, would be totally appreciated.

had many regrets about the fact *Tomb Raider* was what we really wanted to create, what we could not design since we were using another technology. We urged Sony to send us a PlayStation development kit but it wasn't possible, unfortunately. Only some development teams, well-considered by Sony, could access the kit.

> "We were planning on developing The Godfather in the future [...] Conrad was a Corleone"
> Paul Cuisset

Tell us how you developed the popular arcade racer *Moto Racer*?
Moto Racer's starting point was once again an experiment. At Delphine Software we were working then on Silicon Graphics stations, and were provided with a local network. It was really rare at the time. All the machines were connected. I was working on another project, developing *Darkstone*'s engine and its colliding system, specifically. I created a small demo where you could control little cubes in different backgrounds. We were having so much fun that these cubes became motorbikes. I then added network code and we ended up playing a motorbike game with a Capture The Flag feature. It became one of our lunch break's favourite activities and we decided to make something out of it because it was so much fun.

So a demo turned into the actual game?
At the beginning *Moto Racer* was much more ambitious, an open world where you could travel around a 3D island with many tracks. It was unfortunately oversized and we had to give up on the open world. I then reprogrammed the engine completely to create something smaller, a classic racing game. We had the framerate, the speed, and it started like this.

What is your personal opinion about retrogaming? How did you feel when Evercade's Team17 Amiga compilation reached the UK sales' top 40 chart?
I completely understand the nostalgia. Back then our perspective was close to what you can find in auteur cinema. We had a different artistic vision, a freedom. It was very similar to indie games development nowadays, but with a budget. Teams were more creative. When we put forward a project, we didn't care about the market, our concern was focussed primarily on whether our game was fun to play or not. Today developers are also concerned by the same thing, but with a high sales figures ulterior motive. The market was also more responsive: less games and smaller competition. Today it is harder to launch a creative project, considering the amount of games available on the market: it is way harder to make your mark on the scene.

What are *Flashback 2*'s new features, in comparison with the first game?
So many! 30 years have passed. In terms of

» [PlayStation] *Fade To Black* possibly uses the first third-person shoulder camera ever in videogame history.

level design and game design, many things have evolved. *Flashback 2* is way more permissive than the 1992 Mega Drive version, which was very challenging. I tried to keep a 2D view, because it is in the game's DNA, but with some depth. Because we actually are in 3D, cameras move forward and backward. We broke the 2D barrier by letting the main character move to the front or to the back. We simply created depth to give the player a feeling of freedom. From a narrative point of view, things are different, too, much richer. The narrative spine stays simple but there is much more text. Actually, the team finds the story complicated. [Laughs]

You've also added interactive dialogues to the game, haven't you?
Yes, but nothing too complicated. It is not *Cruise For A Corpse*, where you can find keywords allowing you to talk to other characters, where everything is based on dialogs. *Flashback 2* is an action game, with another dynamic.

How does *Flashback 2* meet the expectations of gamers?
Fans from the very beginning will be very happy to get back to known places and rediscover the background, with much more depth. We can understand much better what happened and what will happen. We revisit *Flashback*'s universe, but everything we could not express in 1992 is implemented in *Flashback 2*.

Do you have any examples you can share?

» [Nintendo DS] *Mister Slime*'s great stylus gameplay is one of Paul's most refreshing concepts.

The first episode was not very chatty, many things were only quickly referred to, quite superficially. To design *Flashback 2* we created a huge database gathering all the facts and events that can occur in *Flashback 1* and *2*. About today's players, it is quite complicated because they're not from my generation. Young team members worked a lot on this. It is their sensitivity.

So does the team for *Flashback 2* comprise of just new developers?
The team also gathers veterans. Thierry Perreau worked with me on the first *Flashback* and Raphaël Gesqua, music composer on *Flashback 2*, also worked on the Amiga version and its soundtrack. We are grandpas (not yet, I hope) and young, almost freshly graduated from school, developers. This wide gap is interesting because it creates emulation. At the same time we don't always understand each other on some specific problems. We don't always share the same vision. I hope you can feel this playing *Flashback 2*, there is something young and something older at the same time. I hope young people enjoy playing the game, enjoy its story and gameplay. The latter is quite complex and the game is challenging.

Is it as tough as the original?
Not as much, but not very easy, though. Two controller sticks are necessary to move Conrad around and fight and you need to be at ease with this to enjoy the game fully. *Flashback*'s DNA implies a challenging game and we didn't go completely mainstream with this episode. We want to please gamers, people who like challenging games, not necessarily hardcore gamers.

» [PS3] The horror game *Amy*, offers a wide range of situations and a frightening cast.

Was handling Conrad with two sticks implemented right from the beginning?
Yes. We would have been otherwise too limited in terms of gameplay, since the latter is in 3D. Dual-stick gameplay gave us a good compromise. I think it works quite well and gives a good dynamic. You need minimum skills, of course, to master it. You can use keyboard and mouse on the PC version and we hope the experience will be good with this interface.

Originally *Flashback 2* needed five hours to be beaten, 20 hours are needed now. What happened?
There are many things to tell! It is a quite complex story and there are many things to do when you evolve in the game. We even had to get rid of some features because we did not have time to put them in place. Eventually we restrained ourselves! [Laughs] If it had been possible, the game would have been even longer!

THE RETURN OF CONRAD

What to expect in Flashback 2

■ Paul gathered Raphaël Gesqua and Thierry Perreau, who worked on the first 1992 *Flashback* iteration, with younger developers to send Conrad B Hart to face the Morphs once again. The aliens are attempting to enslave all the solar system civilisations, so Conrad prepares to eradicate the deadly threat. Like the 2013 remake, *Flashback 2*'s gameplay requires one stick to move around with and another one to shoot. Additionally, the shooting action sequences prevail over platforming in *Flashback 2*, meaning it should feel quite different to the earlier games. As you'd expect, the art direction features plenty of Eighties science-fiction film references, like *Blade Runner* and *Total Recall*, giving it a suitably retro vibe. Sadly, Paul has confirmed that no artworks from the original 1992 game will feature in *Flashback 2*'s Gallery Mode, which may upset some fans. However he does tantalisingly tease us with the following. "*Flashback*, *Fade To Black* and *Flashback 2* are all set in the same universe. By playing *Flashback 2*, you will possibly get answers to a few outstanding issues." The game should be on sale now and will be reviewed soon.

MotorStorm

FAST, FURIOUS, FLAWED, FORGIVABLE

» PLAYSTATION 3 » 2006
» EVOLUTION STUDIOS

By the time the PS3 launched in late 2006, I was rather fed up with Sony. Lik Sang, my favourite import shop, had been forced into closure because of legal action over PSP imports. Sony executive Ken Kutaragi was making ridiculous statements about how people should want to work more hours to buy the PS3, and that it was too cheap anyway. Beyond that, the PS3 hype had been misleading. Remember how the E3 2005 *MotorStorm* trailer looked too good to be true? That's because it was actually a VFX studio's work. So when the game finally arrived and received some criticism, I was perfectly happy to believe it and felt like I wasn't missing out by not playing it myself.

Fast forward to 2023, and I'm playing *MotorStorm*. Every negative thing I've ever heard is true – there's no local multiplayer and no Free Race mode, the loading times can be agonising and of course it doesn't look like that first trailer. However, I've just launched my motorbike over a ramp and punched another rider off theirs in mid-air, all while the Slipknot song *Before I Forget* plays in the background. Faced with something so cool, I suddenly find it very hard to care about the negatives.

At launch, a PS3 and *MotorStorm* would have set you back the best part of £500. It's possible that I would have been less forgiving of the flaws if I'd paid that, rather than the £1 I paid for the game. Then again, it feels almost tailor made for me. The variety of routes and vehicles available ensures the brash, chaotic arcade racing remains exciting and intense, and I want to crank up the volume with Pitchshifter and Monster Magnet on the soundtrack. If I'd managed to play *MotorStorm* back when the PS3 launched, I think I could have been won over despite the criticism – no matter how annoyed I was with its publisher.

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» This month two platforming superstars return in brand-new adventures, we sneak our way through the latest Metal Gear Solid collection and discover if the Super Pocket is worth shelling out for

» [Switch] A number of stages require you to outrace Wriggler. Careful, he's faster than he looks.

Super Mario Bros Wonder

A WONDER BY NAME, A WONDER BY NATURE

INFORMATION

- **FORMAT REVIEWED:** SWITCH
- **ALSO AVAILABLE ON:** NA
- **RELEASED:** OUT NOW
- **PRICE:** £49.99
- **PUBLISHER:** NINTENDO
- **DEVELOPER:** NINTENDO EPD
- **PLAYERS:** 1-4

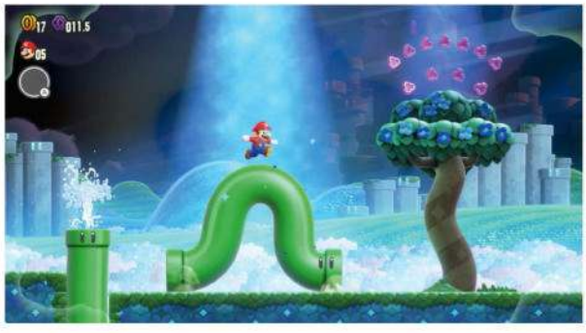
For all the spectacle and creativity found in Mario's latest adventure, it starts off in rather conventional fashion. Mario and his friends are visiting Prince Florian in the neighbouring Flower Kingdom. When the prince shows off the castle's Wonder Flower, it's stolen by Bowser who uses its powers for his own nefarious means. Needless to say, Mario and his mates set off on a quest to retrieve the precious artefact.

One of the delights of the 3D *Mario* games is that you never quite knew what to expect when navigating a new stage. Sure, you're introduced to new base mechanics, but they were simple building blocks that would lay the groundwork for a dazzling array of ingenuity while you explored. The same thing happens with *Super Mario Bros Wonder* and it's largely due to the Wonder Seeds that the plucky plumber must recover.

Find the Wonder Seed that's hidden within the stage and it will significantly transform the stage's structure, presenting Mario with new forms to experiment with as well as a host of wacky challenges. One level might see you riding on the backs of stampeding Bulrushes as they rampage across the stage, the next has you smashing through walls in a new spiky form. The sheer variety of these level transformations are breathtaking and it's a credit to the developers that they always find new ways to impress you.

The Wonder Seeds aren't the only new mechanics at play. We'll address the elephant in the room by saying that Mario's new pachyderm form is more than just a one-note gimmick. The ability to spray water on flowers, swat enemies with your trunk and

» [Switch] Inanimate pipes transform into moving walkways once you snag yourself a Wonder Seed.



» Mario made his first appearance in *Donkey Kong*, before finding huge success with the *Super Mario Bros* series on Nintendo's NES. He's since gone on to star in some of the most acclaimed platforming games of all time, including *Super Mario World*, *Super Mario 64* and *Super Mario Galaxy*. *Super Mario Bros Wonder* is his first new side-on adventure since New *Super Mario Bros U* in 2012.

✱ PICKS OF THE MONTH

DARRAN

Super Mario Bros Wonder

Even an energy-sapping cold couldn't stop me enjoying this. It's a glorious roller-coaster of platform brilliance that constantly surprised me.

NICK

WarioWare: Move It!

The relentless micro-games of *WarioWare* have always suited alternative control schemes well, and this motion-controlled outing is a timely reminder of that.

» [Switch] Multiplayer games can get a little chaotic at times, as well as quite competitive.

WHY NOT TRY

▼ SOMETHING OLD
SUPER MARIO BROS

▼ SOMETHING NEW
SUPER MARIO ODYSSEY

» [Switch] Sadly, the numerous fights you have with Bowser Jr, while fun, aren't especially difficult.

destroy certain items will change how you approach each level, while Mario's new weighty form means his movement needs to be considered as well. Even the music changes when you switch forms, with the light breezy tunes getting bolstered by weightier lower notes.

In addition to his new elephant form, Mario can also encapsulate enemies in bubbles and use said bubbles as a temporary platform. He can also use his Drill ability to tunnel rapidly beneath a level's surface, potentially opening up new routes or performing surprise attacks on vulnerable enemies.

Super Mario Bros Wonder also introduces Badges which bestow a number of different skills to Mario and his friends to help them navigate each stage. Dolphin Kick enhances your swimming abilities, Safety Bounce offers a one-time save if you fall into lava or something equally life-ending, while the Wall-Climb Kick is handy for reaching out-of-the-way areas.

Other Badges either reward you with more coins, let you start each level with a Super Mushroom and even offer hints to hidden items. You can only equip one at a time, which means you have plenty of reasons to revisit each stage.

And you'll want to return to each level because they're so fun to explore. As well as containing a set number of Wonder Seeds, each stage also has three 10-point Flower Coins to find. These new coins are the game's currency, allowing you to buy Badges and Wonder Seeds from the many shops found in the Flower Kingdom.

» [Switch] Mario's new elephant form is genuinely great and more than just a cheap gimmick.

They're also a requirement of the world's residents, known as Poplins. Give these cute tykes a certain amount of Flower Coins and they'll clear annoying obstacles out of the way so that your epic journey can continue.

And there's a lot to take in as you travel throughout the Flower Kingdom. There's a surprising amount of choice in the way you tackle each world, but there's also lots of additional smaller stages that will reward you with a Wonder Seed upon completion. Break Time! stages are breezy little areas that can be completed incredibly quickly, while Search Party levels require you to comb an area for the five hidden tokens that will reward you with a Wonder Seed. KO Arenas require you to tackle enemy-filled areas with a power-up of your choice, while Badge Challenges will earn you a Wonder Seed if you can complete the technically tough challenges they present.

There's a huge amount to see and do in *Super Mario Bros Wonder* and there's plenty to keep you busy once the main campaign is finished as well. Yes, its boss fights are a little simple and yes, we could do without the new talking flower, but these are minor issues. Whether you play on your own or with friends, *Super Mario Bros Wonder* is an absolute joy to experience and proves that Mario still has plenty of magic left in him. ✱

In a nutshell

Mario's latest outing is arguably one of his best yet and is filled with a staggering amount of imagination and ambition. Here's hoping this reinvigorates his future side-on adventures.

» Score **97%**

» [Switch] In a neat touch, some levels let you explore the background and foreground planes, so keep an eye out for hidden items.

PICK OF THE MONTH

Super Pocket

AN ARCADE IN YOUR POCKET

INFORMATION

- **FORMAT:** SUPER POCKET
- **ALSO ON:** NA
- **RELEASED:** OUT NOW
- **PRICE:** £49.99
- **PUBLISHER:** HYPER MEGA TECH!
- **DEVELOPER:** HYPER MEGA TECH!
- **PLAYERS:** 1

WHY NOT TRY

▼ SOMETHING OLD
GAME AND WATCH

▼ SOMETHING NEW
EVERCADE EXP

GAME LIST

Capcom Edition

» 1942, 1943, 1944: The Loop Master, Bionic Commando, Captain Commando, Final Fight, Forgotten Worlds, Ghouls 'N Ghosts, Mega Man, Mercs, Street Fighter II: Hyper Fighting, Strider.

Taito Edition

» Bubble Bobble, Cadash, Chank'n Pop, Don Doko Don, Elevator Action, Football Champ, Growl, KiKi KaiKai, Liquid Kids, Operation Wolf, Puzzle Bobble, Rastan, Space Invaders, Space Invaders '91, The Fairyland Story, The Legend Of Kage, The NewZealand Story, Volfied.

GO DEEPER

The facts behind Super Pocket

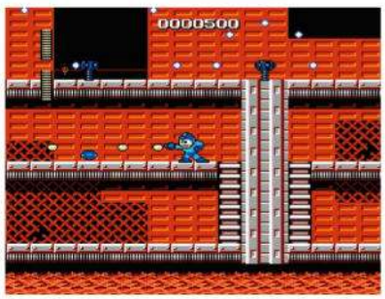
» A single Super Pocket charge equates to around four hours of play – perfect for a commute or lunch hour.

» The Super Pocket only has a single speaker, but the quality of it is good and we didn't notice any distortion during play.

» The Taito Edition is our personal favourite of the pair, due to its range of genres and higher number of games.

Blaze has had some tremendous success in recent years with its Evercade range, and that success looks likely to continue with the Super Pocket (published under its Hyper Mega Tech! branding). While not without its flaws, there's plenty to like about the Super Pocket and we wouldn't be surprised to see it on numerous Christmas lists by the year's end.

Available in both Capcom and Taito variants, the most impressive aspect of the device is just how well built it feels for £50. Everything, from its d-pad to its face buttons, feel pleasing to the touch (with a few noticeable exceptions). A Select and Start button are included on the front panel, while a Home button is used to access the options menu and switch between



» [Super Pocket] *Mega Man* is the only NES game on a device otherwise filled with arcade classics.

» [Super Pocket] We'll never get bored of playing the fantastic *Bubble Bobble*.

Super Pocket games and Evercade cartridges – which massively expands the available games for both systems. The bottom of the device contains a headphone socket, a switch to turn the device on and off and a port for supporting a USB-C charger.

Weirdly, one thing we noticed while playing games like *1942* and *Mercs* was that it could be hard to hit diagonals on the d-pad, which occasionally led to unplanned deaths. We had no such problem on the Taito Super Pocket or when playing Evercade carts on the Capcom device, so maybe it's an emulation issue. Another problem is the placement of the four back buttons. They're simply awkward to use and the lack of button mapping (something highly requested on Blaze's Evercade products) certainly doesn't help things. They feel a little too low down and make playing *Street Fighter II: Hyper Fighting* – arguably the Capcom system's flagship game – rather difficult to play well.

While the back buttons are a little disappointing to use, the same can't be said for the Super Pocket's 2.8-inch IPS screen. It's good quality with decent viewing angles, although the screen's brightness and contrast can't be adjusted. Several of the games across both systems are vertically orientated, meaning a much smaller playing area for games like *1943* and *Space Invaders*. There's a decent selection of display modes, including our preferred Pixel Perfect mode, and although there are scanlines they're not really effective on such a small screen.

» [Super Pocket] You can't link Super Pockets together, so you'll be playing two-player games like *Final Fight* on your own.

» [Super Pocket] In *Street Fighter II: Hyper Fighting* you'll be battling opponents and the Super Pocket's rear buttons.

The actual UI for the Super Pocket is surprisingly elegant. Pressing the Home button gives you six options. Save lets you save up to six slots for each game, Load loads your save states, Controls lets you see what buttons do what, we've already covered Display, while Reset and Quit restarts the loaded game or quits back to the main menu respectively. Then there's Easy Mode, a fantastic addition that effectively lets you play arcade games on their easiest settings.

All the Evercade games we tried with the exception of *Cathedral* worked, but a patch should hopefully sort that. Yes, it's disappointing that its ability to play Evercade carts suggests Evercade fans may never get these games on cartridge, but when viewed in a vacuum, the Super Pocket is genuinely great value for money. Just be mindful of those back buttons.

In a nutshell

It's certainly not perfect, but the Super Pocket is a great little system with access to an astonishing library of games. Needless to say, it's great value for money.

Sonic Superstars

» **System:** PS5 (version tested), PS4, Xbox One, Xbox Series X/S, Switch, PC » **Buy it for:** £54.99 » **Buy it from:** Online, retail

***Sonic Superstars* is a return to the classic Sonic formula, a 2D platformer that feels like the inevitable response to the success of *Sonic Mania*.** This isn't by the same team though – it has been developed by Arzest, the studio founded by Sonic's original artist Naoto Oshima, and it doesn't quite hit the same heights.

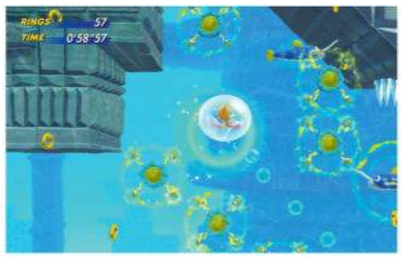
That's not to say that it's a bad game, mind. *Sonic Superstars* feels good to play, as Sonic and chums have their familiar moves and generally handle pretty closely to the way they do in the Mega Drive games. The level designs are varied and occasionally include some pretty interesting gimmicks, such as a stage with mechanical presses that periodically bounce your character upwards. The inclusion of a dedicated stage for each character is nice, as are the Special Stages that build on the original game's spinning mazes. Likewise, boss battles are generally well considered and will tax you at least a little.

But while *Sonic Superstars* does the basics well, it falters with its newer ideas. The new Emerald Powers are so forgettable that the game has to highlight when they may be useful, but we rarely bothered with them. Some novel stage gimmicks stay well beyond their welcome, and a couple of the late game bosses are an absolute drag as a result. Co-op in Story Mode would be greatly improved with split-screen support, and though the Battle Mode does offer this, you're unlikely to return to its basic minigames frequently. The play experience also isn't without problems. We experienced bugs on PS5 and PS4 that required us to quit to the main menu, and experienced occasional minor frame stuttering on PS4.

Overall, *Sonic Superstars* is a solid enough platformer that should at least please most fans of the series – just don't expect it to measure up to the Mega Drive games.

» Score **77%**

» [PlayStation 5] The classic style has been nailed, although background detail isn't always this nice.



» [PlayStation 5] Moving Tails around in a bubble reminded us of the 8-bit version of *Sonic 2*

Metal Gear Solid: Master Collection Vol. 1

System: PS5 (tested), Switch, PC, PS4, Xbox Series S/X
Buy it for: £54.99 **Buy it from:** Online, retail

Disappointing is the best way to sum up Konami's new collection. While there's no denying the quality of the included titles, the execution is rather lacking. Presentation is great with beautiful menus, a digital Master Book that features key revelations from the series, huge screenplays and some lovely graphic novels.

While the emulation for the early *Metal Gear* games is what you'd expect from M2, there are currently no filters or scaling options, meaning they look quite blurry. Nothing has been attempted with the *Metal Gear Solid* sequels either, as they simply output to 720p, while the Switch sequels run at 30fps (*MGS2* originally ran at 60fps on PS2).

Yes, there's plenty of gaming and extras, but from a pure visual standpoint it offers very little over Bluepoint's earlier *HD Collection*.

DARRAN JONES

» Score **72%**

Formula Retro Racing – World Tour

System: Switch (tested), PC, PS4, PS5, Xbox Series S/X
Buy it for: £15.99+ (digital), 34.99 (physical) **Buy it from:** Online, retail

If you're looking for an entertaining arcade-style racer, we'd recommend this fun sequel from Repixel8. The big new addition this time around is the inclusion of muscle cars, which admittedly take a while to master. They don't feel very weighty and as a result they slide all over the place, making them much harder to control than their racing car equivalents. The latter vehicles also feel better designed to handle the huge number of challenging courses that have been included, making them our preferred choice. There's a number of modes, including an expansive Arcade offering, an endurance-sapping Eliminator competition, a Grand Prix mode and the ability to just practice tracks. The lo-fi visuals are delightfully charming and it runs surprisingly well on the Switch. All in all, an enjoyable, if rather conventional racer.

DARRAN JONES

» Score **70%**

THE HOMEBREWER'S KIT

<YOUR MONTHLY GUIDE TO EVERYTHING HAPPENING IN THE HOMEBREW SCENE/>

<!--- HERE'S NATE, WORKING HARD ON DRAWING SOME GRAPHICS BY THE LOOK OF IT. --->

<!--- LOOKS LIKE NATE'S BUSY AGAIN, THIS TIME CREATING LEVEL DESIGNS. --->

<INTRO> WITH OUR REGULAR HOMEBREW HERO ANDREW FISHER SUFFERING FROM ILLNESS, THE HOMEBREWER'S KIT IS A LITTLE LIGHTER THAN USUAL BUT WILL BE BACK TO ITS USUAL LENGTH NEXT ISSUE. THIS MONTH WE SPEAK TO DAD AND LAD CODING DUO SLOANYSOFT AND AMIGAMEJAM WINNER JOHN GIRVIN OF NIVRIG GAMES, AND TAKE A LOOK AT THE LATEST HANDHELD RELEASES WITH ASSEMBLOIDS FOR THE LYNX AND FRASIER FANTASY FOR THE GAME BOY COLOR </INTRO>

<!--- HERE ARE DAVE AND NATE, AS DEPICTED IN FORWARD TO THE PAST. --->

<!--- [ZX SPECTRUM] MANIC MULHOLLAND WAS THE TEAM'S FIRST GAME, AND WAS RECEIVED WARMLY BY THE COMMUNITY. --->

<MAIN HEADER>

KIDS CAN CODE

<INTRO> FOR THE LAST FEW YEARS, FATHER AND SON TEAM SLOANYSOFT HAVE BEEN A PROLIFIC PRESENCE IN THE SPECTRUM HOMEBREW SCENE </INTRO>

<BODY> **"It all started when Nate showed me some of the games he'd coded at primary school using Scratch," says Dave Sloan, the elder member of the father and son development duo Sloanysoft.** "It reminded me of playing about with Spectrum games as a kid, changing a few things in BASIC listings and harbouring an ambition to make games of my own. It was during lockdown, and I had a bit of time on my hands so it dawned on me that with all the modern resources available and the help of the friendly Speccy community that we could have a crack at making something here."

When it comes to the division of the development tasks, the pair are flexible. "It's all very organic, we're always bouncing silly ideas off each other, usually on walks in the nearby park," Dave explains. "Nate comes up with lots of fantastical ideas and designs, then I spend a lot of time trying to fit them into the restrictions of a 41-year-old budget microcomputer. As Nate has such a logical mind, he often helps me with the bug fixing." As for the modern resources used, Dave highlights Jonathan Cauldwell's Multi-Platform Arcade Game Designer (MPAGD) and ZX Paintbrush. "We have been very fortunate to have the talented Mike Richmond and DJ h0ffman providing AY music which I believe was made with Vortex Tracker," he adds.

The first Sloanysoft game was *Manic Mulholland*, a platform game. "It only took a few weeks and was really just intended to be a little surprise for my friend Peter, but we've been so overwhelmed by how nice people have been about our silly little games that it spurred us on to make more," Dave tells us, before struggling to pick out a favourite game. "It's difficult to say, I loved making *Forward To The Past* as it was a very personal story, the *RetroHitch* game involved input and ideas from some lovely people in his Discord, and *Janky Joe*

SLOANY SELECTION

MEGA MANIC MULHOLLAND

<This is a revised version of the first Sloanysoft game, with reworked levels, new levels, music and much more. />

FORWARD TO THE PAST

<The Sloanysoft duo create a time machine, but it's all gone wrong and now they're stuck in the time vortex. />

NEW GAMES NEEDED

Our new email address is waiting for all your homebrew news, previews and more: **retrogamer@futurenet.com**

<!--- [ZX SPECTRUM] FORWARD TO THE PAST SEES DAVE TRYING TO RECONNECT WITH HIS YOUNGER SELF. --->

<!--- [ZX SPECTRUM] HERE'S RETROHITCH OF THE MAN WITH THE GOLDEN JOYSTICK, LOVINGLY RENDERED WITH ZX PAINTBRUSH. --->

<!--- [ZX SPECTRUM] THE POSITIVE RECEPTION TO MANIC MULHOLLAND INSPIRED THE REMIXED RELEASE MEGA MANIC MULHOLLAND. --->

was great fun as I got to include homages to a few of my favourite games, introducing Nate to some of the classics." Currently the pair are working on a successor to *Forward To The Past*, though Dave admits, "It's been on the back burner for a bit."

Does Dave recommend other parents try coding with their kids? "100%! It was an absolute lifesaver during the pandemic, it gave us both a focus and kept us sane," he replies. "The main thing is to have fun with it, nobody is going to get rich making homebrew for old computers. It's all about learning new things, spending quality time and engaging with a fantastic community. Even if you have zero experience coding, there are so many helpful resources out there to guide you through." Of course, while any format is good, Dave has a recommendation. "Sure there may already be somewhere in the region of 40,000 games in the Spectrum archives, but there's always room for more!" </BODY>

<INTRO> TRY OUT THESE GAMES AT SLOANYSOFT.ITCH.IO </INTRO>

THE MAN WITH THE GOLDEN JOYSTICK

<Starring Twitch streamer RetroHitch, this platformer will remind you of classics like *Jet Set Willy*, but with some added twists. />

JANKY JOE IN RETRO HELL

<The protagonist's task here is a jaunt through janky renditions of past favourites, to rescue the souls of past adventurers. />

AI MADE ME DO IT

<Here's a platform game where all the level names were generated by an AI chatbot. "The Streets Of Snottingham" indeed. />

<!--- [C64] TERRY AND MAI DO BATTLE ON COMMODORE'S POPULAR MICRO FOR THE FIRST TIME EVER. --->

NEWS BYTES

<INTRO> ALL THE LATEST NEWS, HANDILY ARRANGED BY FORMAT </INTRO>

<**Amiga:** Beat-'em-up *Krogharr The Beerserker* is looking rather exciting in its first video outing, complete with plenty of decapitations. Watch that at youtu.be/cRQJdLq0ZUQ />

<**C64:** RetroGL's fantastic tribute to the Neo Geo Pocket Color's *SNK Vs Capcom* is now complete, and available to download for free by visiting bit.ly/SvC64 />

<**Game Boy Color:** Weiwei Leung's RPG *Aaling The Ghost*, based on Chinese mythology, has been successfully funded via Kickstarter. Follow its progress at bit.ly/AalingGBC />

<**Mega Drive:** The visually stunning shoot-'em-up *ZPF* now has a demo ROM available. Give it a try at bit.ly/3S5wquD />

<**MSX:** ARC8 has released *Snake And Rhino In The Sketchbook*, a puzzle game in which the two titular animals must co-operate to escape each world. Get it at bit.ly/SnRMSX />

<**Oric:** Commodore Plus has just released a text adventure, *The Smiths Are Dead*, based on the popular Eighties band. It's also on C64. Grab both versions by heading to bit.ly/SmithsText />

<**Saturn:** French developer Frogbull has recently shown off a highly impressive demo version of a *Metal Gear Solid* conversion, which you can watch at youtu.be/aLZcn6WFMjA />

<**SNES:** Infidelity has put out a beta version of a SNES *Metroid* port. Grab the seemingly unstoppable coder's latest work by heading over to bit.ly/MtrdSNES />

<**Various:** Fabrizio Caruso's arcade shoot-'em-up *Stinger* is now available for multiple platforms including Atari, Commodore, Sinclair, Sega and Nintendo systems. You can find it by visiting bit.ly/CrossLibStinger />

<**ZX Spectrum:** Hicks' latest game, a ninja-themed platformer called *Haoken*, is now available for 128K machines. Why not sneak on over to bit.ly/Haoken />

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CHAMPION CODER

JOHN GIRVIN

<INTRO> JOHN WON THE RECENT AMIGAMEJAM: SWORDS & SORCERY WITH ROGUE DECLAN ZERO, UNDER THE NIVRIG GAMES LABEL </INTRO>

<INFO FROM: NORTHERN IRELAND WEBSITE: NIVRIG.COM FORMAT: AMIGA, MOBILE PREVIOUS GAMES: TURBO TOMATO, DODGY ROCKS, SALITAIRE, ATOMS WORKING ON: ROGUE DECLAN ZERO, ISOMETRIC AMIGA ADVENTURE, MYSTERIOUS LICENSED IP />

WHEN DID YOU START WRITING AMIGA GAMES?

<It would have been some time in 1992. Over the next few years I managed to finish two simple Amiga games (*Atoms* and *Daleks*), not finish two more ambitious ones, and start making *Turbo Tomato*, which eventually came out in 2021. I took a long break in there from about 1997 to 2020 though. />

WHAT TOOLS DO YOU USE?

<*Rogue Declan Zero* is written 99% in C with just a few small assembly parts to glue things together. I used CLion with CMake and the Bebbo gcc cross compiler suite. I use a customised FS-UAE that gives me debug output as the game is running, Grafx2 and Aseprite for graphics, and a lot of custom Python scripts to convert assets from modern formats to Amiga runtime binary formats. />

WHAT INSPIRED ROGUE DECLAN ZERO?

<The initial idea was, vaguely, to do a game that supported the new retro twin-stick controller being developed by Abstraction Games. I was aware of the AmiGameJam of course, and the jam deadline was only a few months away so I thought, to save time, procedural levels would save me from having to do a lot of manual level building. It's an action game, so games like *Robotron* and *Berzerk* are touchstones, as well as the mazes and exploring of Shamus. />

WERE YOU PLEASED WITH ITS PERFORMANCE IN THE AMIGAMEJAM COMPETITION?

<The community reaction to *RDZ* has been tremendous and surprising for a game, I felt, was more worthy of a back-in-the-day budget-style release. I've had a lot of positive feedback from people enjoying it, which is amazing! />

WHAT EXTRA FEATURES ARE YOU PLANNING FOR THE FULL RELEASE?

<I'm working on a big update now that I'd hope to have ready in a month or two. There will be some mild rebalancing, a hard difficulty, a new in-game music track, some features aimed at high-score competition play, a lot of bug fixes and at least one and possibly three new game modes. I'm considering releasing it on other platforms as well and possibly a limited physical release. />

<!--- [AMIGA] TURBO TOMATO BEGAN IN DEVPAC 3 WITH DPAINT AND PPAINT, BUT WAS FINALLY COMPLETED IN VISUAL STUDIO CODE. --->

<!--- [AMIGA] A MEETING WITH RALPH AND ERIK OF ABSTRACTION GAMES GOT ROGUE DECLAN ZERO OFF THE GROUND. --->

NEW GAMES NEEDED

Our new email address is waiting for all your homebrew news, previews and more: **retrogamer@futurenet.com**

DATA BURST

ASSEMBLOIDS

<INFO FORMAT: ATARI LYNX (TESTED), WATARA SUPERVISION CREDITS: POLY.PLAY (PUBLISHER), PRIORART (DEVELOPER) PRICE: DIGITAL DOWNLOAD, PHYSICAL CART €29, LIMITED EDITION WITH POSTER €35 WEBSITE: POLYPLAY.XYZ/ASSEMBLOIDS-LIMITED-EDITION-LYNX _1 />

<BODY> **This fun puzzle game was a C64 cartridge and has reached several formats.** Place parts of a face into four bays, trying to make a complete face. Match the four pieces for bonus points to make a full face, or clear the board for a bonus life. The quick-moving gameplay has three difficulty levels and is ideal to pick up and play in short bursts. The gorgeous manual explains access to hidden extras (a picture, music demo and clever 3D landscape to explore). </BODY>

SCORE: 83%

<!--- [LYNX] THE GRAPHICS IN ASSEMBLOIDS ARE NICE AND DETAILED, WITH SOME GOOD USE OF COLOUR. --->

<!--- [LYNX] QR CODES ALLOW YOU TO SUBMIT YOUR HIGH SCORES SO YOU CAN COMPETE IN ONLINE RANKINGS. --->

FRASIER FANTASY

<INFO FOFORMAT: GAME BOY COLOR CREDITS: EDWARD LA BARBERA PRICE: DIGITAL DOWNLOAD (FREE) WEBSITE: EDWARD-LA-BARBERA.ITCH.IO/FRASIER-FANTASY />

<BODY> **If the recent Paramount+ revival of *Frasier* left you longing for the classic characters of the Nineties series, this top-down RPG may well be just what the doctor ordered.** Frasier is throwing a party, but things are going predictably badly as Niles has borrowed his grape scissors and he needs Martin and Eddie to take a walk. Thanks to some choice gags (we liked the Freudian slap attack) and creative battle scenarios, this short but sweet adventure left us wanting more. </BODY>

SCORE: 78%

<!--- [GAME BOY COLOR] FRASIER FANTASY DOES A GOOD JOB OF REPLICATING THE ENVIRONMENTS FROM THE TV SHOW. --->

<!--- [GAME BOY COLOR] THE ETERNALLY IRRITATING NOEL SHEMPSKY ONCE AGAIN PROVES TO BE A THORN IN FRASIER'S SIDE. --->

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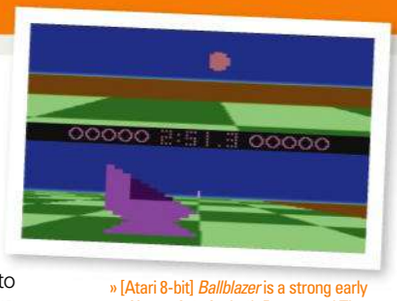
FUTURE

HOT TOPIC

RETROBATES MULL OVER THE SCENE'S MOST INTRIGUING ISSUES

A LOOK AT LUCASARTS

Reminiscing about a studio from a galaxy far, far away



» [Atari 8-bit] *Ballblazer* is a strong early memory of LucasArts for both Darran and Tim.

DARRAN JONES

NICK THORPE

TIM EMPEY

LucasArts left a strong legacy in gaming, thanks to both its adaptations of Lucasfilm properties and strong original games, particularly in the adventure genre. With the studio having closed in all but name a decade ago, we took the time to remember its greatest hits.

NICK

Can you remember your first encounter with a LucasArts game? Mine was an odd one, but I'll let you guys go first.

> "The Star Wars games were very up and down, weren't they?"
>
> NICK THORPE

DARRAN

Ballblazer for me. I remember playing it on a friend's Commodore 64 and it was fantastic, frantic fun, even though I was rubbish at it.

TIM

Same, *Ballblazer*. I think I must have borrowed it from someone because I didn't get to play it very much, but it was pretty impressive on the C64.

NICK

Mine was the loosest possible one – *Indiana Jones And The Last Crusade* on the Master System. It was developed by Tiertex and published by US Gold, but it had the Lucasfilm Games logo in it. So it counts. Sort of.

DARRAN

Did you get to play any of the earlier games like *Rescue On Fractalus!* and *The Eidolon*? I always remember the studio's stuff to be quite technically impressive.

NICK

I did, but not until years later. *Rescue On Fractalus!* was very impressive, and I'll always remember it for the bit where you think you're rescuing a downed pilot and instead get jumped by an alien.

DARRAN

Yup, one of the first big scares in videogames that I can recall at the time. I guess we need to talk about the developer's point-and-click games. What favourites does everyone have?

NICK

I missed out a bit on the point-and-click adventures as a console kid, so I've been playing catch up ever since. Obviously the *Monkey Island* games are brilliant, and I had a lot of fun with *Day Of The Tentacle*.

TIM

I somehow missed out on a lot of them, but I did play through *Full Throttle*… last year. And needed a guide to get through it. I've still got *Day Of The Tentacle* and *Grim Fandango* to look forward to.

DARRAN

Crikey, Games Pass games that Tim still hasn't played yet! I do love the *Monkey Island* adventures, but my favourite is definitely *Indiana Jones And The Fate Of Atlantis*. I can still remember Mel phoning me up at work as she had solved a puzzle we'd been stuck on for ages. The puzzles rarely felt obtuse at the time, or have I misremembered it?

NICK

I can't remember having too many problems with them, but then I also mostly played them in the GameFAQs era, so I'm hardly a reliable commentator.

DARRAN

I can never really recall anything as obtuse as that goat puzzle in *Broken Sword*, but I'm sure

» [Atari 8-bit] Tell us you weren't scared when the Jaggi attacked up close, and you tell us a lie.

» [Amiga] Never mind all the disk-swapping, *The Secret Of Monkey Island* is a classic on any platform.

» [Mega Drive] LucasArts didn't always self-publish – Konami brought *Zombies* to the market.

there were. Where do we stand on the *Star Wars* games? There certainly have been a lot of them.

TIM

So. Much. *Star. Wars.* And I've managed to avoid most of them. Dabbled with *X-Wing* and *Starfighter*, but I've totally missed out on *Knights Of The Old Republic*. Isn't there a remake coming sometime?

NICK

There is, but there hasn't been much news on it lately. The *Star Wars* games were very up and down, weren't they? I remember one of my friends being really into *Masters Of Teras Kasi*, which was far from brilliant. Then you'd have something like *Episode I: Racer*, which was really good.

DARRAN

Yeah, they are very inconsistent. I love the original *X-Wing* games and I thought *Dark Forces* and the first *Super Star Wars* were really good fun, but there's also a lot of dreck out there, like the aforementioned *Masters Of Teras Kasi*. Special mention must go to *Knights Of The Old Republic*, which is an incredibly clever use of the IP. Does anyone have a favourite LucasArts game that's more off the beaten track?

NICK

Zombies Ate My Neighbors isn't exactly off the beaten track, but it's not a point-and-click or *Star Wars* game and it's cartoonish enough that I can enjoy it.

TIM

Back when I was on *Cube* Gary Adams reviewed *Gladius* and described it as, "Strategy gaming at its most beard." Which I thought was hilarious. Years later I downloaded it for the Xbox One and it's very much of its time, including no autosave, so I lost a good few hours because I forgot to manually save, dammit.

DARRAN

Hah, I was going to say *Gladius*. I've still got it on the Xbox and actually really like it. I also remember losing a lot of progress in the game and haven't returned to it since. I just found it to be a refreshing take on the strategy RPG.

NICK

Maybe I'll have to try that one out. Unlike *Lego Star Wars*, which I should avoid according to a 4/10 review in *games™* that proved wholly uncontroversial.

DARRAN

I'll never live that down, will I?

» [PC] Having in-house access to big franchises like *Indiana Jones* and *Star Wars* was certainly a boon.

» [PC] Nick had yet to play *Day Of The Tentacle* when he started working on **Retro Gamer**.

» [Nintendo 64] *Star Wars* games were hit and miss, but *Episode I: Racer* was certainly worth playing.

» [PC] That beard comment is actually very funny. We may borrow that turn of phrase one day.

READERS REACT

What is your favourite LucasArts game?

Francis DiPersio
Maniac Mansion will always be my favourite of the bunch. It offered a masterful medley of campy B-movie vibes, clever puzzles and hilarious writing to cement its place as a timeless classic that I still revisit every Halloween season.

Craig Taylor
TIE Fighter was, and probably still is, my favourite flight sim. I adored it and loved the story and going after the secret weapon hardware. It was awesome!

Retro Reactiv8
Loom. It combined the great storytelling we'd come to expect from Lucasfilm Games with an innovative music-based interface. Sure, it was a relatively short game but it was beautifully put together.

Anthony Bull
After how appalling the last two *Indy* films have been, *Indiana Jones And The Fate Of Atlantis*. It showed that it was actually possible to write a good *Indy* storyline if you focus on the important bit which is the actual story, instead of things like effects and self-deprecating humour.

Samantha J Foster Composer
Outlaws! Such an amazing Wild West FPS – with a great storyline.

Jon Greenham
Zombies Ate My Neighbors for the soundtrack and because I didn't own a system that could play *Monkey Island*!

3DOgaming #Play3DO
An overlooked one that I always loved playing was *Star Wars: Yoda Stories*. The second, and final, title in LucasArts' *Desktop Adventures* series. It's easy to pick up and play at any time and has great replay value. I spent hours upon hours with this game.

Chris Noble
Nothing has ever been quite as immersive and enjoyable an experience than playing through the first *Monkey Island*. Beautiful artwork and music, and a line in humour that's never been replicated anywhere else.

Six_Is_Dead
Grim Fandango, always. Why? Viva la revolución!

Geoffrey Hay
X-Wing – it's the game that forced me to buy my first PC. The expansion disks were great, as was the adaptive soundtrack. The sequel, *TIE Fighter*, was even better!

COLLECTOR'S CORNER

READERS TAKE US THROUGH **THE RETRO KEYHOLE**

COMPLETE (MINUS ONE) NES RETAIL SET

"A 20-plus year journey for a full set, only missing *Stadium Events*. Prices on these carts vary between $.25 upwards of $500 each. *Little Samson* and *Flintstones: Surprise At Dinosaur Peak* are the most valuable carts in the lot."

AMOUNT PAID: UNDER $5,000

CREATURE FROM THE BLACK LAGOON PINBALL

"This was found in Wakulla Springs, where most of the original movie was filmed! Creech has always been my favourite Universal Monster, so getting his pinball game was an early priority for me."

AMOUNT PAID: $1,500

NEO GEO MVS 'GOLDIE' MODEL

"An early Neo Geo system brought to the states. The nickname refers to its gold art package and woodgrain appearance. This was always one of my favourite Neo Geo oddities and easily one of the most comfortable cabs to play on. I bought this broken."

AMOUNT PAID: $500

BIO

NAME:
Adam Kessell

LOCATION:
Tallahassee, Florida, USA

ESTIMATED VALUE OF COLLECTION:
"I'd estimate $100K"

FAVOURITE SYSTEM:
NES

FAVOURITE GAMES:
Tecmo Super Bowl, Mushihimesama, Creature From The Black Lagoon (pinball)

WEBSITES:
twitch.tv/pastblaster
podouken.com

ARCADE ANTICS

Candy cabinets and NES nostalgia drive this month's collector

Our latest collector got his start in gaming in a way that will resonate with plenty of American gamers. "My earliest memories of gaming was playing my dad's ColecoVision. Growing up he was a huge *Video Pinball* fan and we had a huge collection of Coleco and Atari 2600 games," says Adam Kessell. "My brothers had received a NES for Christmas one year, but they very rarely played it. That meant it was fair game for me to play whenever I wanted to. I remember there were shops near our house that would have used games for $1 on NES once the SNES and Genesis had hit the market, so I'd go there with my $5 allowance and get a handful of games."

That love for Nintendo's 8-bit hit turned into active collecting in high school. "I remember when I hit 100 NES games thinking, why not go for the full set? I remember back then that games like *Little Samson* were $80 and thinking, 'Who would be crazy enough to spend $80 on a NES game?'" Today, Adam has an almost complete collection for the console. "The journey took me about 20 years to (nearly) complete my set with my last game being *The Flintstones: Surprise at Dinosaur Peak*," he tells us. "The one game I'm missing is *Stadium Events* and I have no plan on ever acquiring one unless I find one at a garage sale. Prices have just gotten too extreme for me to pursue one."

Adam started to collect arcade games in 2005. "I bought a broken *Street Fighter II* in a Dynamo cabinet. You could hear the game running, but the monitor was not working, and it was only $75. I took the gamble on it and decided to try and repair it. Thanks to the internet, I was able to learn how to rebuild the monitor chassis and get it going again." After moving to Tallahassee in 2010, Adam picked up the pinball bug with *Street Fighter II*, and through repairing it met his friend, Podouken podcast co-host and business partner Rob, with whom he founded an arcade repair shop. "After a few years, people were asking to have parties in our shop and we decided to try and find a spot to open an actual arcade. Also, our wives were very happy about taking our games out of the house, and into a proper location. Flippin' Great Pinball has just hit its seven-year anniversary, and we are looking to expand in the near future."

Despite space concerns, Adam isn't finished collecting. "I'm always looking for things for the arcade floor or new boards to have in my personal collection. We recently picked up an *F-Zero AX* cabinet that will sit next to my *Mario Kart GP* in the arcade, but the home space is at capacity. Basically, if something comes in, something has to go." What might come in, then? "I'm always on the lookout for new PCBs and panels for my cabinets. My pinball grail would be an *Elvira House Of Horrors* pinball by Stern."

Got an impressive collection of your own? Contact us at:
RetroGamerUK @RetroGamer_Mag retrogamer@futurenet.com

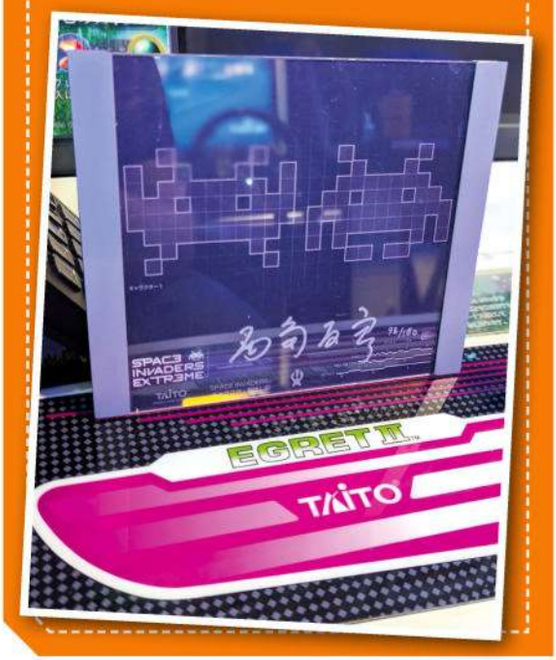
CANDY CABINETS
"I use these at home and on my weekly arcade stream. All of these were purchased dead and I brought them back to life. Because they were broken, prices were very low compared to what they go for now."
AMOUNT PAID: WELL UNDER $500 EACH

JEWEL IN THE CROWN

SPACE INVADERS EXTREME LIMITED EDITION PRINT

■ "Signed by *Space Invaders* creator Tomohiro Nishikado in 2009. This was a gift from a friend who knew I was a massive *Space Invaders* fan. This is one of my absolute favourite things in my collection."

PAID: GIFT



BARGAIN HUNT

Your guide to the rising world of retro prices

THE COVER STAR

ATARI 2600

Atari's classic console starts at **£20** in tested, working order, with boxed models of the Atari 2600 Jr starting at around **£30.** A 'Woody' model will set you back **£70,** unless you fancy gambling on an untested machine. Don't forget, all models need an analogue-compatible TV.

ANCIPITAL

This early Jeff Minter effort isn't cheap at **£35,** but there's a less expensive option. *Commodore Format Power Pack 21* also contains *Ancipital* along with various other games, and that can be had for under **£5.**

PARASOL STARS

You'll really make it rain by spending **£100** on the PC Engine original, or slightly more on the TurboGrafx version. Loose NES carts start from **£25,** Game Box ones **£12.50,** and a big-box Amiga version can be yours for **£30.**

CASTLE OF ILLUSION STARRING MICKEY MOUSE

Complete Mega Drive copies of Mickey's classic adventure start from **£7.** Complete Master System versions can go as low as **£2,** and the Game Gear versions at **£12.**

FREESPACE 2

You won't have to search the stars for an affordable copy of Volition's under-appreciated game – a complete big-box copy can be had for **£5,** or you can just get it for **£6.99** on Steam or GOG if you prefer digital games.

SPIDER-MAN

This one set our Spidey-senses tingling – the PlayStation version starts from just **£8,** but the Dreamcast version swings higher at **£45.** Prices for the US-only N64 version are all over the shop, from **£37.50** to **£120.**

FADE TO BLACK

You won't have to keep the lights off to afford Paul Cuisset's *Flashback* sequel – the PlayStation version can be had for just **£3,** and the PC version can be found for **£7,** though the *Classics* reissue is often cheaper.

HOW MUCH?!

TOXIC CRUSADERS

This Game Boy game is exceptionally rare, so much so that someone paid **£1,000** for it. And when we say they paid **£1,000** for it, we mean they spent a grand on the box. No cartridge and no manual, though the plastic insert was present. At least it was in good condition? At that price, you'd hope it was.

Prices correct at time of print

MY RETRO LIFE

PERSONAL STORIES ABOUT OUR **SHARED PASSION**

PRECIOUS MEMORIES

Darran gets a time machine

At the end of August I celebrated my 50th birthday. I marked the occasion by watching *Jurassic Park* on a local cinema screen and eating some incredibly delicious pasties from Philps Pasties – all in all, it wasn't a bad way to finish off my forties.

Being a child at heart, I received a number of amazing and very thoughtful gifts. Melanie bought me a US copy of *Castlevania: Legacy Of Darkness* (which I've been after for the last four years) and a swanky Tissot watch. I also received an Indiana Jones-style fedora, a mould of one of the raptor heads from *Jurassic Park*, as well as vouchers and Lego. One of the most thoughtful presents I received though, was from my cousin Martin, who recently gifted me an amazing picture containing 50 of my favourite games.

It went so much further than that though, as all the games hold exceptionally precious memories for me, either those I have shared with Martin or with other friends and family. Proudly displayed in the order of each game's release, the epic selection features everything from *I, Robot* to *Magic: The Gathering Arena* and while it's heavily console focussed (Martin and I didn't regularly play games together until those systems came out) it serves as a fantastic snapshot of my gaming life.

When I look at the image of *GoldenEye 007* it lets me recall all the frantic multiplayer fights I used to have with Melanie and my friends. It instantly brings a smile to my face, as you could always tell where Melanie was during a game, as her view was normally pointing towards the floor. If I gaze at *Final Fantasy: Tactics Advance*, it reminds me of when I put my back out whilst working on *games™*. I had to spend two agonising weeks lying on the floor and playing on my GBA was one of the only things I could comfortably do.

When I peruse the image of *Devil May Cry*, it instantly takes me back to Martin's house, where he proudly showed off his new Japanese PS2 games. I didn't care for *Final Fantasy X*, but *Devil May Cry* was phenomenal and it convinced me that I needed to own a PS2. What a shame then that the PAL version I bought was so terrible. Another memory with Martin is evoked if I glance over to *Super Castlevania IV*. It was the first game I used to show him my newly modded SNES, which now had stereo sound and we listened in awe as the chandeliers on one of the stages rocked from speaker to speaker.

Seven N64 games made it into the 50, which makes perfect sense when you consider how much I love Nintendo's console. Seeing *Ridge Racer 64* on there is particularly gratifying as it marks one of the few times that I've managed to complete a racing game that Martin hasn't. The memories are coming thick and fast now. *Dead Or Alive Xtreme Beach Volleyball* isn't a particularly good game, but my daughter Emily was obsessed with its intro as a child, while *OutRun 2006: Coast 2 Coast* takes me back to playing Sumo's game with my daughter Alice sleeping blissfully on my stomach.

> "All the games hold exceptionally precious memories for me"
>
> **DARRAN JONES**

Interestingly, only five shmups have made the list, but they're all bangers. Sure, I can't look at *Gradius V* without being reminded of my *games™* 9 being knocked down to a 7, but I've still got amazing memories of that game, as I have for *Axelay*, *UN Squadron*, *Radiant Silvergun* and *Thunder Force III*.

Seeing the image of Ryu throwing a fireball reminds me of the many games we used to play at lunchtime when we were still working in an office, while both *Eagle Flight* and *Until Dawn: Rush Of Blood* highlight my obsession with the early days of PSVR. Another obsession is *Magic: The Gathering Arena*, a game I introduced Martin to when he lived with us during lockdown.

I don't know how many hours of my life I've devoted to those 50 games, but I'd imagine it probably stretches into months. I love how games can trigger our imaginations and how some, like *The Last Of Us* and *Spec Ops: The Line*, have the power to shock and thrill us.

This gift is so much more than just a picture, it's a time machine, something that I can use to effortlessly send me back to some of my favourite gaming memories. Melanie was so touched by what it represented that she's even allowed it to hang in the house, rather than my shed.

Thanks a lot cuz, I really appreciate it.

WHERE'S STRIDER?

SO WHERE'S CAPCOM'S GAME?

If you've never read issue 50 of **Retro Gamer**, here's why I love *Strider* so much. As a youngster I struggled in school, where my interest in books and a love of nature led to me being bullied constantly, by girls and boys alike. This bullying continued in my mid-teens, as I would be picked on by some of the older kids that lived on my estate. Aside from nature, videogames were my only interest and I retreated into them, which led to me discovering *Strider*. Capcom's game featured a character who represented everything I wished I could be – athletic, heroic, someone who was not afraid to tackle their problems face on, despite how scary they might be. I embraced the game and became so good at it that other arcade visitors would gather around to watch me play whenever I visited Quay Amusements. *Strider* gave me a confidence boost that I badly needed at the time and I'll always remember that.

A FANTASTIC AND TOUCHING WAY TO CELEBRATE MY 50TH BIRTHDAY.
ALL THE SNES GAMES THAT MADE THE TOP 50. HOW MANY HAVE YOU PLAYED?
[IOS] I PLAY MTG: ARENA EVERY DAY, I EVEN STREAMED IT FOR A WHILE.

[ARCADE] SEQUENCES LIKE THIS MEANT I ALWAYS HAD A CROWD WHEN PLAYING CAPCOM'S ARCADE GAME.
[PS3] UNCHARTED 2 IS FULL OF DAZZLING SETPIECES, BUT THE TRAIN SECTION IS THE ONE I ALWAYS THINK OF.
THIS IS A MORE RECENT MEMORY. I SHARED MY ADVENTURE ONLINE AS I MADE MY WAY THROUGH THE GAME.
[NINTENDO 64] I'VE FOND MEMORIES OF MELANIE USING A GUIDEBOOK TO HELP ME THROUGH PARTS OF OCARINA OF TIME.
[MEGA DRIVE] I WAS IMPORTING GAMES FROM AN EARLY AGE. GETTING THIS, STRIDER AND MOONWALKER ON THE SAME DAY WAS AWESOME.
INDIANA JONES and the INFERNAL MACHINE
Pure Action. Pure Adventure. Pure Indy.
TOP SCORE

GAMING GOODIES

Readers share their favourite game-related gifts

Richard Hazeldine
A C64 from Secret Santa on the old **Retro Gamer** forum! It was already signed by Rob Hubbard, Ben Daglish, Martin Galway and others. I've since added Paul Norman, Jeff Minter and Giles, while Gary Penn drew a little Rockford underneath.

Rothenberger Paul
The ultimate for me would have to be my *Pitfall!* water canteen. Oh, and of course the **Retro Gamer** calendar.

Sakura Hoshi:Deacon Blues
My sister gave me one share of stock in Nintendo for my birthday one year. It was framed and the plaque said Happy Birthday in Japanese.

Jason
My Amiga 1200 that I received back in Christmas 1993. It was my first gaming machine ever and the reason I love gaming so much. And the games are still incredible to play.

PressPlayonTapeNL
I once received a six-button Mega Drive joypad for my birthday. First I was disappointed with it because the upper buttons were actually quick-fire buttons. So essentially it was still a three-button joypad. But I liked the feel of it and ended up using it quite a bit.

Chris Reynolds
My parents got me a Super Nintendo one Christmas, along with four controllers, a Super Multitap, *Super Mario Kart* and a Super Scope with the console. I then received *Super Bomberman* a few weeks later for my birthday. I spent long days that winter having competitions.

Luke The Fox VA
A *Banjo-Kazooie* controller holder that I use to hold my controllers that I got for Christmas from a friend of mine.

I Like To Play
My brother got me an awesome Chain Chomp lamp a couple of years back.

Newbie Coder
For a big birthday two years ago, my wife bought me a custom arcade cabinet kit with the exact specs I wanted, single-player controls with a trackball and a spinner. I loved building it and love playing with it to this day!

MAILBAG

HAVE YOUR SAY... SEND US A LETTER OR MAKE YOURSELF HEARD ON SOCIAL MEDIA – **TWITTER.COM/RETROGAMER_MAG**

WIN!

Every month, one lucky writer-in will receive a spanking copy of one of our classic retro books. Good luck everyone!

MUSICAL MUSING

Dear **Retro Gamer** team,
Seeing Smooth McGroove's second comeback on YouTube reminded me of your little Q&A you did with him in one of your earlier issues. Videogame music is something I find dazzling, thanks to the skill and love put into certain iconic tracks. Every time I hear the final boss track in *Yoshi's Island* on the SNES I'm like, "Wow, they went all out."

What are your favourite videogame soundtracks? My personal favourite can be found here: tinyurl.com/48nx8kuv
Kind regards,
Matteo Fossi

» If you like the a cappella covers of Smooth McGroove we can definitely recommend that you listen to *Bob-omb Battlefield.*

Thanks for writing in, Matteo. We really enjoyed listening to the tracks that you shared and you'll probably be pleased to hear that Smooth McGroove was interviewed in issue 252. In terms of videogame soundtracks, Darran thinks *Super Castlevania IV* is faultless, while Nick is a big fan of *Headhunter,* which is apparently the first videogame soundtrack to ever be recorded at Abbey Road.

STAR LETTER

COMMUNITY SPIRIT

Dear **Retro Gamer**,
One of the things I love about retro gaming is the great sense of community spirit that can be found within it. Sure, there's always a few that upset the apple cart, but generally it's full of passionate people, many of which are incredibly generous and helpful.

» [PlayStation] If there are other readers like Matthew who are new to the PlayStation, we can heartily recommend *Resident Evil 2.*

I recently started collecting games for the original PlayStation, as it was a system I never owned back in the day and I joined a few PlayStation-specific groups. The advice I was given was phenomenal, explaining the differences between PAL and NTSC, the best games I should look out for and interesting peripherals to try. When my PlayStation suddenly stopped working, a kind gentleman (who I won't name to spare his blushes) not only fixed the disc-spinning issue with my machine, but even modded it in case I wanted to experience games that didn't get released in Europe. He did this for absolutely no cost.

I've been genuinely overwhelmed by the sheer generosity and spirit of people in this community and it's reignited my own passion for gaming. I hope other readers have similar stories they can share.
Matthew Elkins

What a fantastic little story, Matthew. It's always nice to find a group of like-minded people and it sounds like you're enjoying the PlayStation as well. It's a cracking machine with lots of great games to discover. We'll look and see if we have a book about Sony's console that we can send you.

BACK TO THE ARCADES

Hi **Retro Gamer**,
I first of all want to say that I'm a huge fan of the mag and still maintain my subscription, despite moving across the Atlantic and now residing in Canada.

» It's not everyday you stumble across a *Space Invaders* and *Galaxy Force 2* cabinet.

Recently I've been re-reading old issues of **Retro Gamer** (or would that be **Retro Retro Gamer** nowadays?) and have read the old articles about Arcade Watch and the discussion around that. I think that nowadays we're at the point that any classic arcades out in the wild should be highlighted and shared so I thought these pictures from the Skyline Tower at Niagara Falls might be of interest to the readers of this esteemed publication.

I wonder if there are any legs in an international Arcade Watch feature? As I still maintain my love of city breaks despite living in Canada. I'd love to visit random arcades while sightseeing around North America. Anyways, keep up the great work!
Cheers,
Tim D, Montreal

It's great to hear you're still enjoying the magazine, Tim. We did think about resurrecting Arcade Watch when the magazine first restarted, but some readers mentioned that the games had often been bought by collectors before they could enjoy them. Thanks for sharing the images, it's always nice to see classic arcade games out in the wild.

A CHRISTMAS COMPETITION

Hi **Retro Gamer**,
I seem to remember Darran plays *Christmas NiGHTS* every year.

Have you thought about running a competition this year? I play it

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» Nick and Darran presenting **Retro Gamer** 158. Nick dressed appropriately for a Sonic celebration.

myself most years and it would be good to compete against fellow readers. I've attached a couple of screenshots of my scores but I'm sure there are people out there smashing this.

Perhaps a feature on other Christmas-related games would be good too. I played *Blue Stinger* last year and I'm on the lookout for other Christmas-related games to play this year.

Cheers,
Luke Middleham

You're quite right Luke, Darran does like to revisit *Christmas NiGHTS* every year. An unofficial competition sounds fun, so we're sharing your score to give other readers something to aim for. In terms of Christmas games, have you played *Batman Returns*, *Moley Christmas* or *Shenmue*? They should all keep you busy.

MAG PREVIEWS

Hi **Retro Gamer**,

I really enjoyed the inside **Retro Gamer** videos you shared on YouTube. Maybe you could bring them back? It's great for people who buy the magazine in a shop but don't have time to look there in the magazine to see if the particular issue has articles the reader is interested in. At least, this is how I discovered what's inside the next issue.

Many thanks,
Lisa

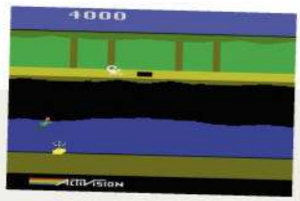
Hi Lisa, we're glad you enjoyed those videos, they were a lot of fun to make. We're not sure if we'll ever revisit them, but if we do we'll let you know.

DISCUSSED THIS MONTH

Gaming purchases

Darran's been using some of the funds from his London Gaming Market sale to buy some high-end shmups he's either never played or foolishly sold on. Nick on the other hand has been grabbing a few Atari 7800 games that have passed him by. Tim just rolled his eyes at both of them and went back to Games Pass.

» Here's Luke's score for Spring Valley. Are you able to beat it?



Your say

Every month, Retro Gamer asks a question on social media and prints the best replies. This month we wanted to know…

What's the most technically impressive Atari 2600 game you've played?

Tony Cruise
Phoenix – it manages to capture all of the arcade game mechanics with minimal flicker. Plus, it plays very well.

JaxxAl
I quite like *Star Wars: The Empire Strikes Back* on the Atari 2600. It's fast and fluid, and a decent enough game.

starnamedstork
Video Chess. Not only for being able to render a full chess board on the VCS, which was previously believed impossible, but it also plays a surprisingly competent game for a 1979 home system. *Sargon II* was stronger, but required an expensive computer like the TRS-80 or Apple II.

Carl Lavery
Raiders Of The Lost Ark was very ambitious for the Atari with some rather complex game mechanics for the time and a game that could actually be beat.

Indie Gamer Chick
I nominate *Frankenstein's Monster*. You guys want a write-up on it? I'd be honoured.

Bird Up
Solaris, by far. I haven't played it in ages, but even looking at screencaps of it now, it looks more like an early NES game than what you would expect to see on the Atari 2600. It also has rather complex gameplay for an Atari game if I remember correctly.

The Law
For me that was *Space Shuttle* by Activision. Not only for its 3D but with all the indicators, lights and sound FX. I actually made Commander (due to a glitch).

lucagiocatore79
Pitfall! and *Jungle Hunt* were great! Stunning graphics and they sound beautiful.

Videopolis
I think probably *Fatal Run* or *Xenophobe*. I mean, those late-Eighties releases were aiming technologically sky high, considering what the VCS was built for.

Riggz Solo
Pitfall II: Lost Caverns. Adding a custom chip to the cartridge, making for better graphics and sound, made this technically the best game on the system.

Sean Smith
Riddle Of The Sphinx. It came out around the time of the *Raiders* game, but it was superior in gameplay. When the new 2600+ comes out in November, I hope to play *ROTS* first.

retro GAMER

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Cover Image
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Printed by William Gibbons & Sons Ltd, 26 Planetary Road, Willenhall, WV13 3XT

Distributed by Marketforce, 5 Churchill Place, Canary Wharf, London, E14 5HU www.marketforce.co.uk. For enquiries, please email: mfcommunications@futurenet.com

ISSN 1742-3155

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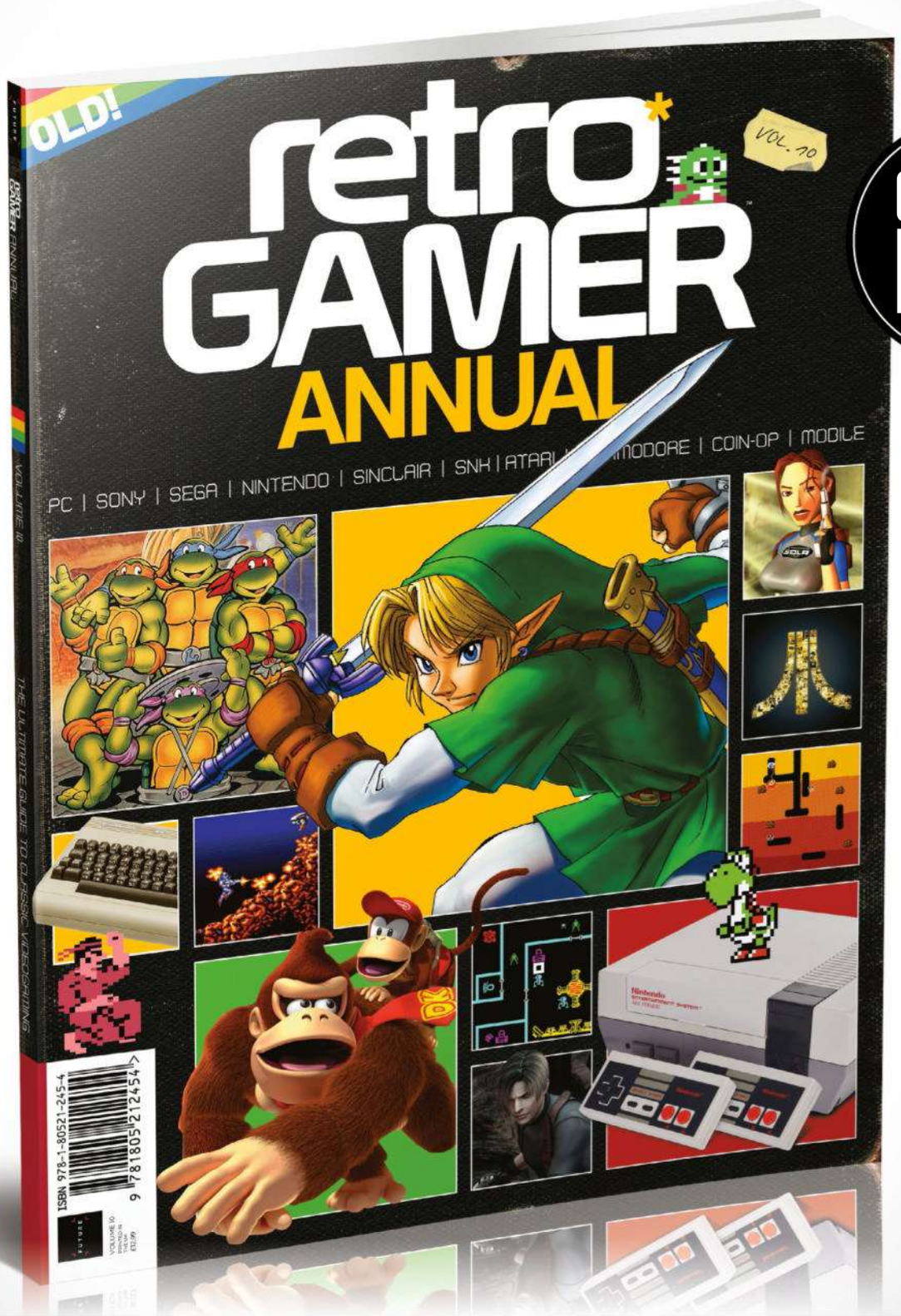

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TEKKEN 5: LEE'S ENDING

» Can you imagine discovering that your adoptive father only took you in to serve as a rival for his biological son? If anything would screw someone up psychologically, that would – and that's Lee Chaolan's life. So let's skip to the end of *Tekken 5*, where he's won the King Of Iron Fist Tournament, to see how he deals with his newfound power.

01

» Everything seems to be going rather well for Lee – he's relaxing by the pool, being massaged by a lovely lady. All he needs now is a good drink, so he snaps his fingers to summon his manservant.

02

» Enter Heihachi, dressed in budgie smugglers and a bow tie, presumably at Lee's behest. We can understand the desire to humiliate the man, but surely the servitude would be enough? Lee clearly disagrees.

03

» Heihachi dutifully takes the order, but then grumbles about his new role with Lee in earshot. Do you think it's the uniform? It can't be. That fundoshi in *Tekken 4* exposed his beefy buttocks for all to see.

04

» Lee reminds Heihachi that his new bow tie isn't just to make him pretty – it's rigged to detonate at his command. We can definitely appreciate the inspiration from *Battle Royale*, even if we still think the whole 'dressing your dad in skimpy clothes' thing is more than a little bit weird.

05

» Rendered compliant by the threat of an explosive decapitation, the patriarch of the Mishima family suddenly sets about getting that drink. Now Lee will have everything he wants – except, presumably, the kind of therapy that will help him understand why he wanted this in the first place.

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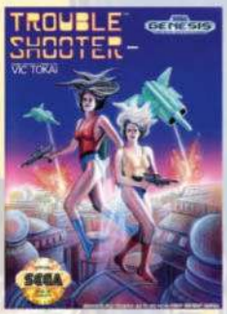

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